

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF PUERTO RICO**

In re:

THE FINANCIAL OVERSIGHT AND
MANAGEMENT BOARD FOR PUERTO RICO,

as representative of

THE COMMONWEALTH OF PUERTO RICO *et al.*,

Debtors.¹

PROMESA Title III

Case No. 17 BK 3283-LTS

(Jointly Administered)

In re:

THE FINANCIAL OVERSIGHT AND
MANAGEMENT BOARD FOR PUERTO RICO,

as representative of

PUERTO RICO ELECTRIC POWER AUTHORITY,

Debtor.

PROMESA Title III

Case No. 17 BK 4780-LTS

(This court filing relates only to
Case No. 17 BK 4780-LTS)

¹ The Debtors in these Title III Cases, along with each Debtor's respective Title III case number and the last four (4) digits of each Debtor's federal tax identification number, as applicable, are the (i) Commonwealth of Puerto Rico (Bankruptcy Case No. 17 BK 3283- LTS) (Last Four Digits of Federal Tax ID: 3481); (ii) Puerto Rico Sales Tax Financing Corporation ("COFINA") (Bankruptcy Case No. 17 BK 3284-LTS) (Last Four Digits of Federal Tax ID: 8474); (iii) Puerto Rico Highways and Transportation Authority ("HTA") (Bankruptcy Case No. 17 BK 3567-LTS) (Last Four Digits of Federal Tax ID: 3808); (iv) Employees Retirement System of the Government of the Commonwealth of Puerto Rico ("ERS") (Bankruptcy Case No. 17 BK 3566-LTS) (Last Four Digits of Federal Tax ID: 9686); and (v) Puerto Rico Electric Power Authority ("PREPA") (Bankruptcy Case No. 17 BK 4780-LTS) (Last Four Digits of Federal Tax ID: 3747).

**EXPERT DECLARATION OF
SANDRA RINGELSTETTER ENNIS**

NERA ECONOMIC CONSULTING, INC.

February 25, 2019

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I. ASSIGNMENT AND QUALIFICATIONS

A. ASSIGNMENT

1. On October 3, 2018, I filed a declaration in this matter (“My October Report”) on behalf of National Public Finance Guarantee Corporation, Assured Guaranty Corp., Assured Guaranty Municipal Corp., and Syncora Guarantee, Inc. (collectively, “Movants”) in the PROMESA Title III proceedings before the United States District Court for the District of Puerto Rico. I submit this declaration in connection with the Movants’ Motion for Relief from the Automatic Stay to Allow Movants to Enforce Their Statutory Right to Have a Receiver Appointed.

2. This declaration primarily provides the Court an update on my opinions in My October Report, based on events that have occurred since My October Report was filed, and additional documents that have been produced in discovery since that time.

3. I understand that fact discovery in this matter is ongoing. My opinions are subject to revisions based on new information (including information from ongoing fact discovery, new reports, testimony by PREPA’s proffered experts, or new filings by PREPA’s counsel) that subsequently may be provided to, or otherwise obtained by, me.

4. The materials considered in preparing this declaration are listed in Exhibit 1.

Exhibit 1. *Materials Relied Upon – See Attached*

B. QUALIFICATIONS

5. A summary of my qualifications was provided in My October Report.

6. My curriculum vitae is attached as Exhibit 2.

Exhibit 2. *Expert CV – See Attached*

7. NERA is being compensated for its time at standard billing rates and its out-of-pocket expenses at cost. My current hourly rate is \$850. The rates charged for other NERA personnel working at my direction on this matter range from \$250 to \$850 per hour. NERA's compensation is not contingent upon the nature of my findings or on the outcome of this matter.

II. SUMMARY OF FINDINGS

My conclusions are as follows:

1. A politically independent, professional receiver is the best option for executing PREPA's Fiscal Plan until the closings of the contemplated concession and privatization transactions.
2. The government of Puerto Rico has set a goal to replace the management of PREPA with private operators. PREPA has a Fiscal Plan in place which, if successfully executed, is projected to improve its operations and reduce fuel and operating costs. The Fiscal Plan requires significant operational and structural changes that would be more effectively executed by independent, professional management.
3. Implementation of the Fiscal Plan is at risk because of PREPA's mismanagement and inability to execute, a dismissive and non-compliant relationship with the Energy Bureau, and continuing politicization.
4. PREPA continues to be a politicized organization. For example, the Trust employee system has led to politicization of the organization, high turnover corresponding to election cycles, inefficiency, and an inability to execute.
5. The timeline for replacing PREPA's current bureaucracy with private management has already been delayed, and will very likely be delayed further, increasing the need for independent management in the interim period.
6. Federal government officials have expressed frustration with PREPA's politicization and organizational incompetence, jeopardizing PREPA's ability to receive federal funding.

III. THE COMMONWEALTH GOVERNMENT AND THE FISCAL PLAN CALL FOR CURRENT MANAGEMENT TO BE REPLACED WITH INDEPENDENT PROFESSIONAL OPERATORS TO ACHIEVE SIGNIFICANT IMPROVEMENTS OVER THE STATUS QUO

8. In January 2018, Puerto Rico Governor Ricardo Rosselló announced the transformation plan for Puerto Rico's energy sector, saying PREPA "will cease to exist as it deficiently operates today."² This plan included a major structural change for PREPA – fully leveraging private sector market expertise and management – with private management and operation of the transmission and distribution assets and privatization of the generation assets. The timeline targeted to select the private companies that would be tasked with transforming and modernizing the energy system was 18 months, as announced in January 2018. In the nearly 14 months since then, that timeline has progressively shifted further out, and there is no longer any clear endpoint.

9. Specifically, the transformation plan contemplates two structural changes to PREPA that would overhaul management, placing PREPA in the hands of private management. The first structural change would place PREPA's transmission and distribution assets under the management of a private sector third-party concessionaire. The assets would reportedly still be owned and regulated by the government of Puerto Rico, however they would be operated by a company with experience in the utility industry. The second structural change would require the sale of PREPA's generation assets to one or more third parties.

10. Omar Marrero, the director of the Puerto Rico Public-Private Partnerships Authority (the "P3 Authority") summarized the strategy underlying the transformation, stating, "The reality is

² Office of the Governor, "Message of the Governor of Puerto Rico," Ricardo Rosselló, January 22, 2018.

that PREPA will stop existing but will be there as owner of the assets. The operations and maintenance and all incidental services such as billing will also be passed on to the private sector.”³

11. The certified August 2018 PREPA Fiscal Plan (the “Fiscal Plan”) describes a systematic transformation of PREPA’s generation, transmission, and distribution assets, its management, its labor contracts, its safety policies, its supply contracts, and its corporate structure.⁴ This overhaul of PREPA is necessary because PREPA has been systematically mismanaged for years. This mismanagement has been documented by many observers, including the investigators of the Federal Oversight and Management Board for Puerto Rico (the “FOMB”), the U.S. Department of Energy (the “DOE”), the Krueger Report commissioned by the World Bank, Congressional reports, PREPA’s regulatory authority (the Puerto Rico Energy Bureau, or the “Energy Bureau”), consultants hired to improve PREPA’s operational performance, consultants hired by PREPA’s regulatory authority, and even by PREPA itself.⁵

12. My October Report further documents the overwhelming consensus on this point.

13. Politically independent, professional management would provide the best opportunity to effectively execute the Fiscal Plan prior to the contemplated concession and privatization transactions, as well as other important goals, such as:

- a. Improving the near-term operating performance of PREPA’s electric generation, transmission, distribution, and customer service systems;
- b. Transforming the culture and organization of PREPA to make it more efficient and effective;

³ The P3 Authority is an entity owned by the government of Puerto Rico, which is responsible for managing public-private partnerships on the island. Eva Lloréns Vélez, “Final Puerto Rico T&D Concession Key Precursor for Generation Asset Sale,” *Caribbean Business*, January 25, 2019.

⁴ I am not expressing an independent opinion on the validity of the assumptions in the Fiscal Plan.

⁵ The Puerto Rico Energy Bureau was previously the Puerto Rico Energy Commission or PREC. I referred to this entity as PREC in My October Report.

- c. Eliminating the politicized relationship of PREPA with the Governor and Legislature of Puerto Rico;
- d. Establishing an effective relationship between PREPA and its regulator;
- e. Maximizing the value of PREPA's assets in the contemplated concession and privatization transactions.

A. THE FISCAL PLAN OUTLINES KEY OPERATIONAL IMPROVEMENT INITIATIVES

14. The Fiscal Plan envisions PREPA's transformation as a two-step process. The first step would be completing the aforementioned transmission and distribution and generation transactions, while at the same time addressing a number of operational issues. These operational initiatives are expected to be completed in parallel with the transactions, or in approximately 18 months beginning from FY 2019 (i.e., July 2018). The second step would be transforming the power sector by implementing further structural reforms after the privatization of the generation assets and the transmission and distribution system is completed, in order to achieve the goals of a modern, efficient, and reliable power sector.

15. The Fiscal Plan requires PREPA to implement several initiatives to improve revenue collection and reduce costs—initiatives that will have to take place at the same time that PREPA is improving its operations in other fundamental ways. The operating improvements are identified as the “Work Plan 180” initiatives, and as other operational improvement measures identified elsewhere in the Fiscal Plan.

B. A SUCCESSFUL TRANSFORMATION WOULD GENERATE PROJECTED SAVINGS OF MORE THAN \$900 MILLION PER YEAR ACCORDING TO THE FISCAL PLAN

16. The Fiscal Plan projects large reductions in operating costs for PREPA, relative to the status quo, if it is able to implement the transformation of the power sector described as a shift to lower-cost power sources, including renewable and natural gas generation resources.⁶

17. The Fiscal Plan presents estimated rates from 2019 through 2023 under two scenarios. The “Status Quo” scenario assumes that PREPA continues to run similarly to how it has been. The “Power Sector Transformation” scenario assumes that the transformation of PREPA is implemented successfully. Exhibit 3, below, documents PREPA’s projected rate increases under the “Status Quo” and “Power Sector Transformation” assumptions. Under the Status Quo, average rates are projected to increase from \$0.221/kWh in Fiscal Year 2019 to \$0.238/kWh in Fiscal Year 2023, exclusive of any debt service.⁷ These projected rates are set to match PREPA’s estimated expenses, including operating expenses and maintenance expenses, but excluding debt service and pension obligations. According to the Fiscal Plan, the Status Quo projections assume that “operational initiatives are implemented.”⁸ The failure to implement these initiatives would presumably result in even higher operating expenses and therefore even higher rates than what is projected in the Status Quo assumption.

18. The Fiscal Plan also estimates expenses, and the corresponding average rates, assuming a successful transformation of PREPA. In the Power Sector Transformation scenario, rates are estimated to decline to an average of \$0.17/kWh in 2023.⁹

⁶ Fiscal Plan, pp. 38, 43. As previously noted, I am not expressing an independent opinion on the validity of the assumptions in the Fiscal Plan, including as relates to the Fiscal Plan projections discussed herein.

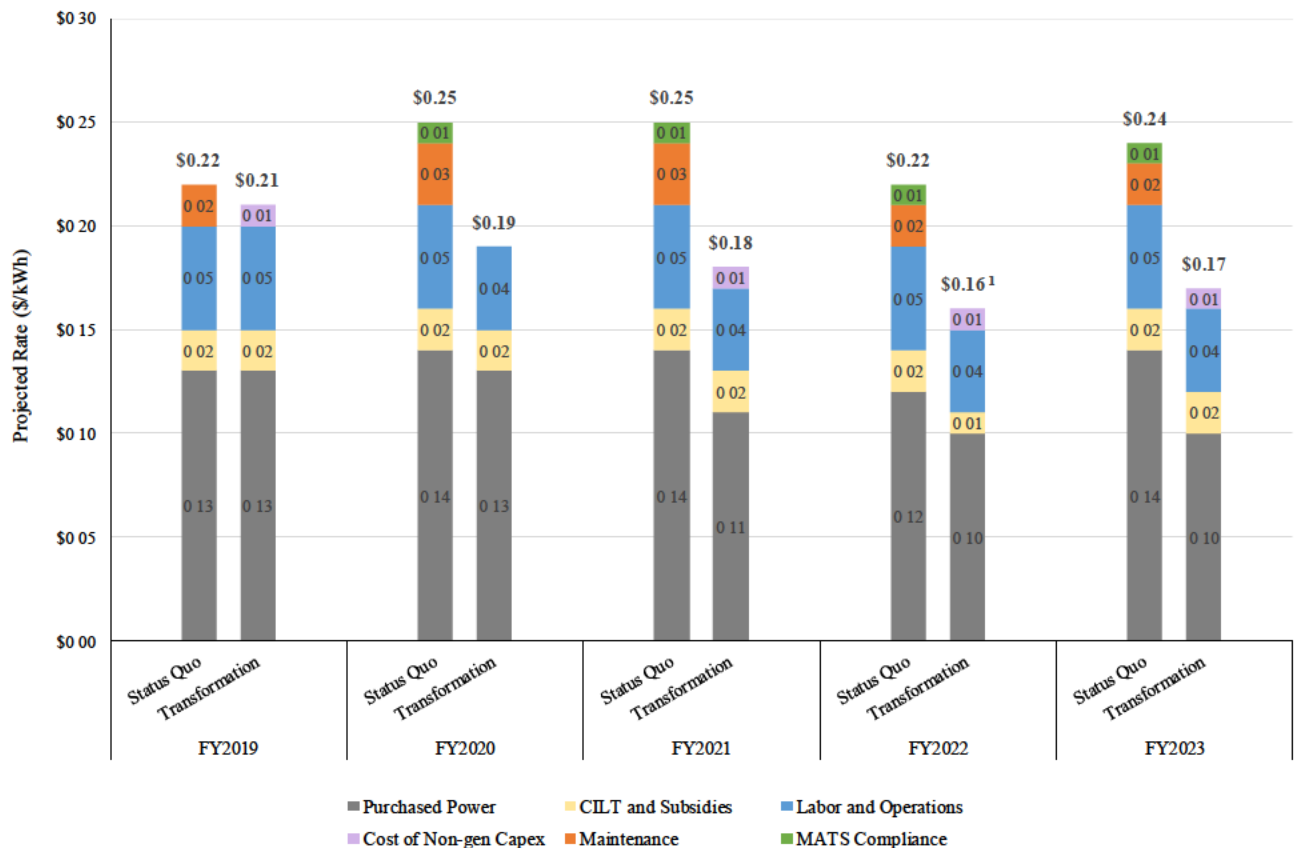
⁷ Fiscal Plan, p. 36.

⁸ Fiscal Plan, p. 36.

⁹ Fiscal Plan, p. 43.

PREPA_LS0046257-71, at 60.

Exhibit 3. *Projected Rates Under Status Quo and Power Sector Transformation Assumptions*



Notes and Sources:

- PREPA, "Puerto Rico Electric Power Authority - Fiscal Plan," August 1, 2018, pp 38, 43

¹ Does not match 0.17c/kWh in the Fiscal Plan due to rounding

19. This rate reduction in the Power Sector Transformation Scenario represents an improvement of approximately \$0.07/kWh in Fiscal Year 2023. Based on PREPA's 2023 generation estimate of 13.29 billion kWh, the difference in rates between the two scenarios from Fiscal Year 2019 translates into an operating expense reduction of approximately \$930 million in 2023.¹⁰ As previously noted, given that the Status Quo scenario assumes the successful implementation of certain operational initiatives, this difference would be even larger in the event that PREPA does not achieve those initiatives. And as discussed in this declaration, PREPA is not, in fact, achieving many of those initiatives.

¹⁰ Fiscal Plan, p. 32.

1. Work Plan 180 Initiatives

20. The Fiscal Plan stated that 19 of the 23 Work Plan 180 initiatives could be completed “within [the] 18-month transformation period.”¹¹ Fourteen of the Work Plan 180 initiatives were assigned an “initiative sizing” that represents the “total avoided future cost increases.” The aggregate value of the “total avoided future cost increases” was estimated to be between \$585 million and \$805 million.¹² This does not include the value of the nine initiatives for which the value was listed as “TBD” or “N/A.” Given that these “TBD” or “N/A” items are included among the other initiatives, it is reasonable to assume that they will ultimately represent some additional positive value, which has not yet been sized by PREPA and/or the FOMB. Thus, the “total avoided future cost increases” are likely underestimates.

21. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

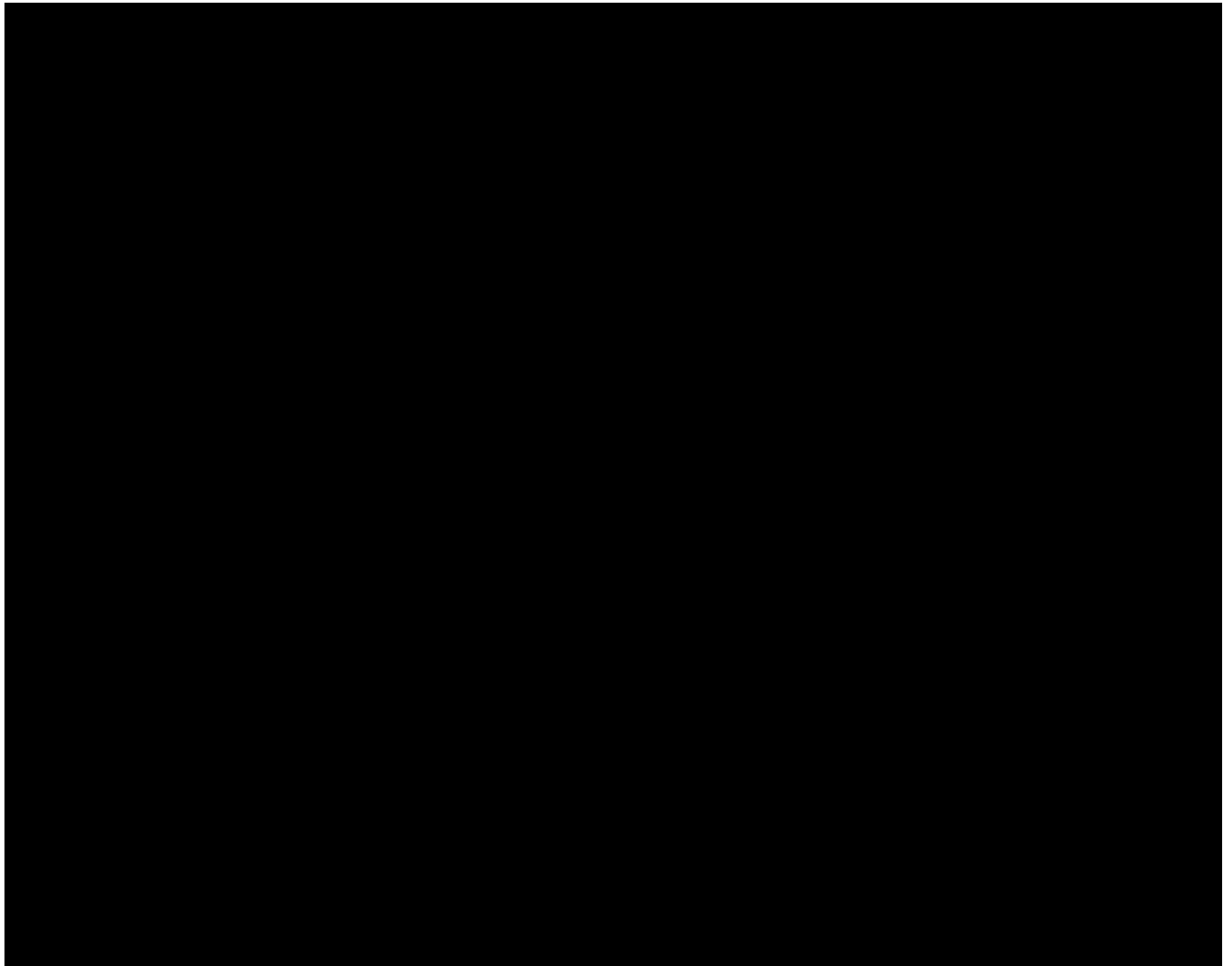
[REDACTED] See Exhibit 4 below.

¹¹ Fiscal Plan, p. 108. It is not clear if the 18-month transformation period began with the announcement of the transformation plan in January 2018, or if the transformation calendar was essentially reset to the beginning of Fiscal Year 2019 in the Fiscal Plan.

¹² Fiscal Plan, p.108.

¹³ The August status reports are PREPA_LS0005605–16. The February status reports are PREPA_LS0066405–25.

Exhibit 4. *Estimated Savings from Work Plan 180 Initiatives*



2. Other Initiatives

22. The Fiscal Plan identifies other operational initiatives, or measures, to improve PREPA's operations, though some appear to be redundant of the Work Plan 180 initiatives.¹⁴ The estimated savings for these operational improvements vary annually from Fiscal Year 2019 – 2023,

¹⁴ For example, the Fiscal Plan lists a "Renewable PPOA Price Renegotiation" initiative with estimated sizing of \$45-55 million on page 108. On pages 86 and 115, it lists a measure for "renegotiating renewable purchased power contracts for cost savings" that is estimated to have a forecasted impact of approximately \$40 million a year from FY 2020 - FY 2023. The overlap between the two sets of initiatives means that the cost savings estimates are not additive.

depending on the timing of savings from each initiative. The Fiscal Plan expects the greatest savings for these initiatives to be realized in Fiscal Year 2022, at \$442 million.¹⁵

Exhibit 5. *Operational Initiatives (Measures) from the August 2018 Fiscal Plan*

No.	Category	Initiative	Page	Forecasted	Forecasted
				FY 2019	FY 2023
(1)	(2)	(3)	(4)	Savings	Savings
				(5)	(6)
				----- millions USD -----	
1	Revenue	CILT Excess Consumption Collection	83 & 114	TBD	TBD
2	Revenue	Current Accounts Receivable Collection	83 & 114	TBD	TBD
3	Revenue	Aged Accounts Receivable Reduction and Collection	83 & 114	TBD	TBD
4	Revenue	Non-technical Loss Reduction	83 & 114	TBD	TBD
5	Fuel & Purchased Power	Economic Dispatch	86 & 115	\$ 44 30	\$ 54 00
6	Fuel & Purchased Power	Increased LNG Utilization	86 & 115	40 50	47 10
7	Fuel & Purchased Power	Purchased Power - Renewable - Price Improvement	86 & 115	0 00	41 20
8	Fuel & Purchased Power	Purchased Power - Conventional - Price Improvement	86 & 115	0 00	110 00
9	Fuel & Purchased Power	Fuel Procurement Contracts - Price Improvement	86 & 115	TBD	TBD
10	Fuel & Purchased Power	Commercial Loss Reduction	86 & 115	0 00	22 30
11	Labor Operating Expense	Medical Benefit Reform	96 & 116	44 40	44 40
12	Labor Operating Expense	Pension Benefits Reform	96 & 116	0 00	58 00
13	Labor Operating Expense	Overtime Benefit Reform	96 & 116	10 00	10 00
14	Labor Operating Expense	Headcount Reduction (Retirements)	96 & 116	21 20	21 20
15	Labor Operating Expense	Christmas Bonus Removal	96 & 116	3 40	3 40
16	Labor Operating Expense	Rightsizing	96 & 116	TBD	TBD
17	Non-Labor/Other Operating Expense	(Initiatives to be defined by PREPA)	106 & 117	TBD	TBD
18	Maintenance	(Initiatives to be defined by PREPA)	106 & 118	TBD	TBD
Total				\$ 163.80	\$ 411.60

Notes and Sources:

- PREPA, "Puerto Rico Electric Power Authority: Fiscal Plan," August 1, 2018

¹⁵ Fiscal Plan, p. 82. Analysis of these other initiatives is complicated by the fact that the Fiscal Plan does not attribute a value to 8 out of 18 of them. However, it is reasonable to assume that there is additional expected value associated with initiatives where the estimated savings are given as "TBD." Thus, based on the available data, the total savings estimates depicted in Exhibit 5 are likely underestimates.

**C. FAILURE TO IMPLEMENT THE OPERATIONAL IMPROVEMENT
INITIATIVES WILL RESULT IN OPERATING LOSSES ACCORDING TO THE
FISCAL PLAN**

23. The Fiscal Plan demonstrates that PREPA must successfully implement operational initiatives to simply break even. Without the initiatives, PREPA's current rate structure—as well as the future rate structure envisioned in the Fiscal Plan—is insufficient to cover its operating expenses, resulting in an annual loss of approximately \$100 million in Fiscal Year 2019, with the loss increasing to about \$400 to \$500 million per year from Fiscal Year 2020 to 2023.¹⁶ This, in turn, would require increased offsetting revenues, resulting in higher rates to ratepayers.

**D. PREPA'S PREVIOUS IMPROVEMENT PLANS REQUIRED OPERATIONAL
INITIATIVES SIMILAR TO THOSE IDENTIFIED IN THE CURRENT FISCAL
PLAN**

24. In My October Report, I identified PREPA's history of operational initiatives that attempted to increase revenues, reduce expenses, and/or improve performance. For example, FTI Consulting and AlixPartners created detailed plans years ago to implement such initiatives. As illustrated below, many of these initiatives were substantially similar to the initiatives that are still targeted for PREPA in its current Fiscal Plan. In other words, it appears that PREPA never accomplished many of these initiatives. Indeed, as discussed in more detail in Section IV.A.1, below, PREPA's own reporting indicates that it is still struggling to accomplish such initiatives.

25. FTI's November 2014 "Accounts Receivable and CILT Report" focused on "an analysis of PREPA's collections, government accounts receivable, and CILT programs and made recommendations with respect to these items, along with a timeline for potential implementation."¹⁷

¹⁶ Fiscal Plan, p. 37. These figures are taken from the Fiscal Plan and therefore incorporate assumptions included in the Fiscal Plan. As previously noted, I do not offer an independent opinion on the validity of such assumptions.

¹⁷ FTI Capital Advisors, "Accounts Receivable and CILT Report," November 15, 2014, p. 8. CILT stands for Contributions in Lieu of Taxes. CILT expense, the amount PREPA owes to municipalities, is supposed to be calculated

For accounts receivable, FTI provided detailed recommendations on collection and account management in dealing with both general and government clients. On the CILT program, FTI analyzed the structure and found that PREPA has historically not taken actions to pursue collections beyond sending monthly bills, and FTI also found that PREPA's interpretation of CILT policies needed to be confirmed with the Energy Bureau.¹⁸ Given that PREPA is still suffering from issues with collections and CILT, as identified in its Fiscal Plan, it does not appear that these recommendations were implemented. Moreover, PREPA's February status report states that its CILT initiative is "At Risk," as PREPA does not appear to have implemented a course of action to address delinquent municipalities, nor has it issued Fiscal Year 2019 municipality bills (which began in July 2018). The date for implementing the next steps is shown as "TBD."¹⁹

26. Likewise, similarly described operational initiatives were also included in PREPA's proposed revenue requirements for Fiscal Year 2017 in PREPA's previous rate case before the Energy Bureau. PREPA's projected savings included reductions in CILT, increased charges for reconnection, reduced theft, improvements in procurement and inventory, savings from employee attrition, and medical benefit efficiencies. PREPA projected savings of approximately \$103 million for Fiscal Year 2017.²⁰ Again, based on the fact that substantially similar initiatives are still targeted in the Fiscal Plan, it appears that PREPA never accomplished many of these initiatives. *See also* Section IV.A.1, below.

27. AlixPartners, under Lisa Donahue the Chief Restructuring Officer for PREPA, prepared a "Hand-Over" presentation dated February 2017 that identified potential recurring savings or revenue increases that could be obtained through operational restructuring work streams.²¹ For each work stream, AlixPartners highlighted the actions it had taken and then provided a "strategy implemented for continuity and sustainability" – i.e., AlixPartners told PREPA how to maintain the operational improvements it had instituted.²² For many of the operational improvements, a specific

based on the actual electricity usage of municipalities, subject to statutory usage caps and an exclusion with respect to for-profit enterprises. FTI Capital Advisors, "Accounts Receivable and CILT Report," November 15, 2014, p. 19.

¹⁸ FTI Capital Advisors, "Accounts Receivable and CILT Report," November 15, 2014, p. 89.

¹⁹ PREPA_LS0066420.

²⁰ CEPR-AP-2015-0001, "Final Resolution and Order," January 10, 2017, pp. 36-42.

²¹ AlixPartners, "AlixPartners' Hand-Over Strategy Presentation to the Governing Board," February 1, 2017.

²² AlixPartners, "AlixPartners' Hand-Over Strategy Presentation to the Governing Board," February 1, 2017, p. 3.

PREPA employee was identified as responsible for the continuity of the initiative going forward. Such operational work streams addressed issues related to fuel inventory and sourcing, customer service, energy theft, employee benefits, fleet management, and developing the organizational structure. Once again, PREPA apparently never accomplished these initiatives in that these very similar operational improvements are still reflected in PREPA's Fiscal Plan today. *See* also Section IV.A.1, below.

28. As another example, the April 2017 Fiscal Plan projected recurring annual savings of \$254 million.²³ These savings primarily would have resulted from initiatives in fuel and generation, customer service, and procurement processes. Fuel and generation initiatives included generation dispatch and implementing plans to reduce forced outages; customer services initiatives included collection on past-due accounts and addressing non-technical losses; and procurement initiatives included addressing inadequate inventory, fleet, and real estate management.²⁴ It is apparent that PREPA failed to successfully implement initiatives to achieve these savings and, yet again, very similar operational initiatives are included in the current fiscal plan. *See* also Section IV.A.1, below. Similarly, strategic plans dating back to at least 2015 have failed to be successfully implemented.²⁵

29. PREPA has a long history of developing operational plans that it fails to execute. Joaquin Villamil, an economist with the Puerto Rico Chamber of Commerce, said with respect to PREPA, *"In Puerto Rico we have a long history of [producing] documents that never were used for anything and never resulted in anything."*²⁶

30. As detailed in Section IV.D.1 below, PREPA continues to employ several consultants and advisors at substantial expense, without meaningful or timely progress towards completing its necessary initiatives—many of which are the same or similar to initiatives previously laid out for PREPA for many years.

²³ Puerto Rico Electric Power Authority, "Puerto Rico Electric Power Authority Fiscal Plan," April 28, 2017, p. 63.

²⁴ Puerto Rico Electric Power Authority, "Puerto Rico Electric Power Authority Fiscal Plan," April 28, 2017, pp. 63, 84 - 89.

²⁵ *See, e.g.,* "PREPA's Transformation: A Path to Sustainability," June 1, 2015.

²⁶ Debtwire, "PREPA to focus on natural gas as next step for energy production," February 25, 2019. (emphasis added).

E. PREPA'S BUREAUCRACY CANNOT PERFORM BASIC FUNCTIONS

31. PREPA has not performed the basic tasks of a utility. Its operations have been hindered by management's miscommunication, disorganization, and failure or lack of decision-making, which have resulted in waste and inefficiency.

32. Organizations that worked with PREPA have expressed doubts about PREPA's operational abilities. [REDACTED]

[REDACTED]

33. [REDACTED]

[REDACTED]

²⁷ PREPA_LS0015697.

²⁸ PREPA_LS0015697.

²⁹ PREPA_LS0046543.

³⁰ PREPA_LS0047128.

[REDACTED]

34. [REDACTED]

[REDACTED]

35. And PREPA's issues with communication seem to be continuing now. [REDACTED]

[REDACTED]

36. PREPA executives have themselves conceded the existence of pervasive and disabling bureaucracy within the organization. Nelson Diaz, a former member of the Board of Directors, stated in his autobiography that PREPA faced issues including, "lax governance, a bloated workforce with duplicative functions, obsolete equipment and crumbling infrastructure."³⁴ Current Executive Director Jose Ortiz summed it up by stating, "bureaucracy here never surprises me."³⁵

³¹ PREPA_LS0046353.

³² PREPA_LS0015592.

³³ PRCOR3_00002871.

³⁴ Nelson A. Diaz, *Not from Here, Not from There*, 2018, p.229.

³⁵ PREPA_LS0045828.

IV. THE FISCAL PLAN IS IN JEOPARDY BECAUSE PREPA LACKS INDEPENDENT, PROFESSIONAL MANAGEMENT

A. PREPA IS FAILING TO IMPLEMENT OPERATIONAL IMPROVEMENTS

1. PREPA's Own Current Reports Reveal that Important Fiscal Plan Initiatives are "Not on Track", "At Risk," or "On Hold"

37. PREPA is required to report its progress toward meeting critical Fiscal Plan goals on a monthly basis to the FOMB. Yet, those reports merely highlight PREPA's continuing lack of progress toward meeting these critical goals.

38. [REDACTED]

[REDACTED]

[REDACTED] See Exhibit 6, below. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

³⁶ The 10 percent of the "Completed" initiatives equals $(9.52\% = (2 \text{ Completed Initiatives}) / (21 \text{ Total Initiatives}))$; the 33 percent of the "On Track" initiatives equals $(33.33\% = (7 \text{ On Track Initiatives}) / (21 \text{ Total Initiatives}))$; the 38 percent of the "At Risk" or "Not on Track" initiatives equals $(38.10\% = (5 \text{ At Risk} + 3 \text{ Not on Track Initiatives}) / (21 \text{ Total Initiatives}))$. PREPA_LS0066407-19.

Exhibit 6.



39.

[Redacted text block for item 39]

40.

[Redacted text block for item 40]

³⁷ PREPA_LS0066416.

³⁸ PREPA_LS0066409.

³⁹ PREPA_LS0066409.

⁴⁰ PREPA_LS0066409.

[REDACTED]

41. [REDACTED]

[REDACTED]

42. Many others have noted how PREPA's bureaucracy has resulted in delays. [REDACTED]

[REDACTED]

⁴¹ The first property is also listed as "In Progress/On Hold." PREPA_LS0066409.

⁴² PREPA_LS0066409.

⁴³ PREPA_LS0066409.

⁴⁴ PREPA_LS0005605.

⁴⁵ PREPA_LS0005730.

⁴⁶ PREPA_LS0010693.

⁴⁷ PREPA_LS0066407.

[REDACTED]
[REDACTED]
[REDACTED]⁴⁸

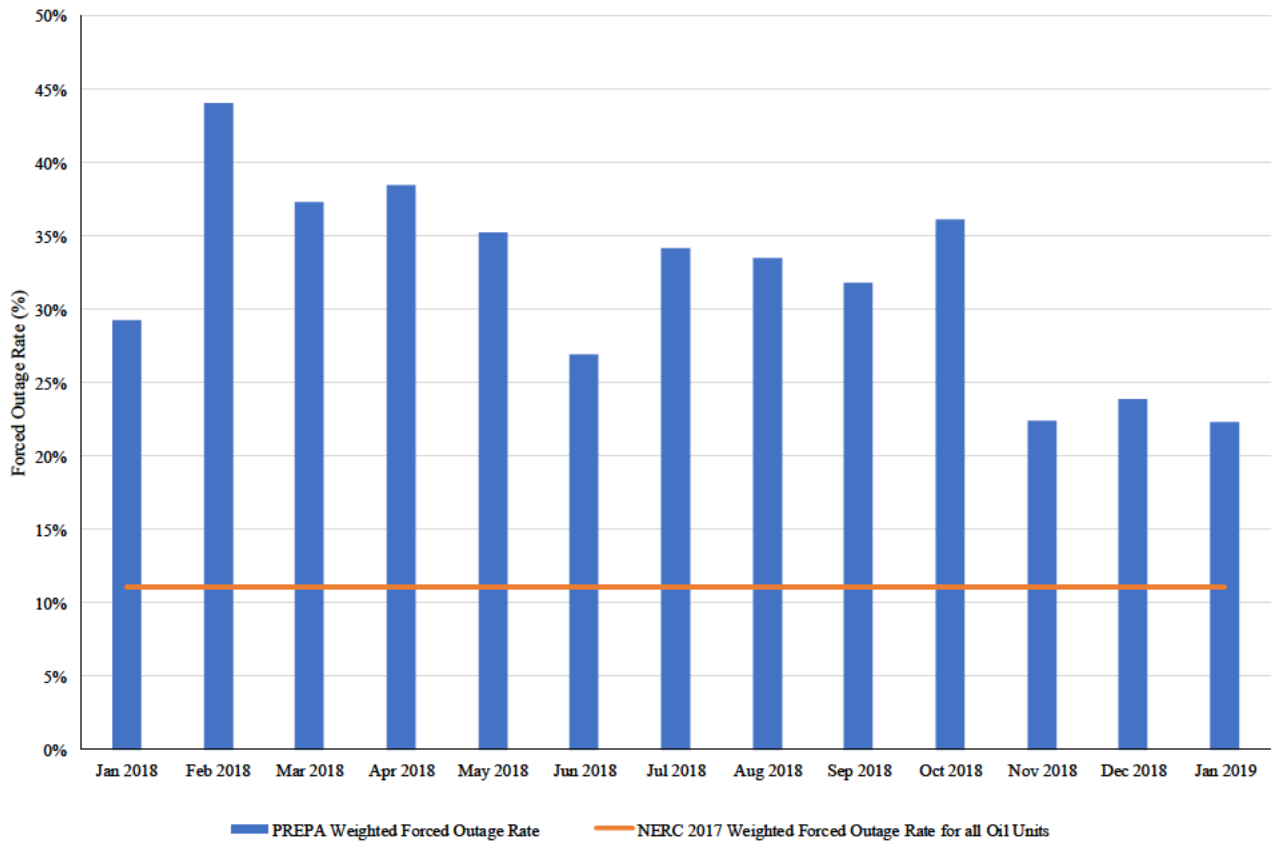
2. PREPA Continues to Mismanage Its Generation, Transmission, and Distribution Assets

43. The Forced Outage Rate is a metric used in the utility industry to estimate the outage rates for generation facilities. PREPA's Weighted Forced Outage Rates at its oil-fueled facilities in 2018 and January 2019 are well above the North American average for similar oil-fueled facilities.⁴⁹ See Exhibit 7, below.

⁴⁸ PRCOR3_00002838.

⁴⁹ This calculation only includes the oil-fired facilities: San Juan Units 7 – 10, Palo Seco Units 1 – 4, and the Aguirre Units 1 - 2 units. Exhibit 3 of My October Report mistakenly identified PREPA's reported "System Efficiency" as a generation outage rate metric. Exhibit 3 of that report is withdrawn.

Exhibit 7. *PREPA's 2018-2019 Monthly Weighted Forced Outage Rates as Compared to the North American Average for Oil-Fueled Facilities*



Notes and Sources:

- Data on PREPA SH and FOH from PREPA_LS0023725 and PREPA_LS0066448
- Data on NERC WFOR from NERC 2017 Generating Unit Statistical Brochure 2 - All Units Reporting

44. PREPA has also failed to make substantial progress in reducing its transmission and distribution outages. As discussed in My October Report, SAIFI, SAIDI, and CAIDI are some of the metrics used to measure electric utility distribution system reliability.⁵⁰ These standard metrics are used by PREPA, as well as throughout the electric utility industry, to measure outage rates of the distribution system, by looking at the frequency and duration of power outages affecting customers.⁵¹ Specifically, SAIFI is the measure of the average *frequency* of outages; SAIDI is the measure of the

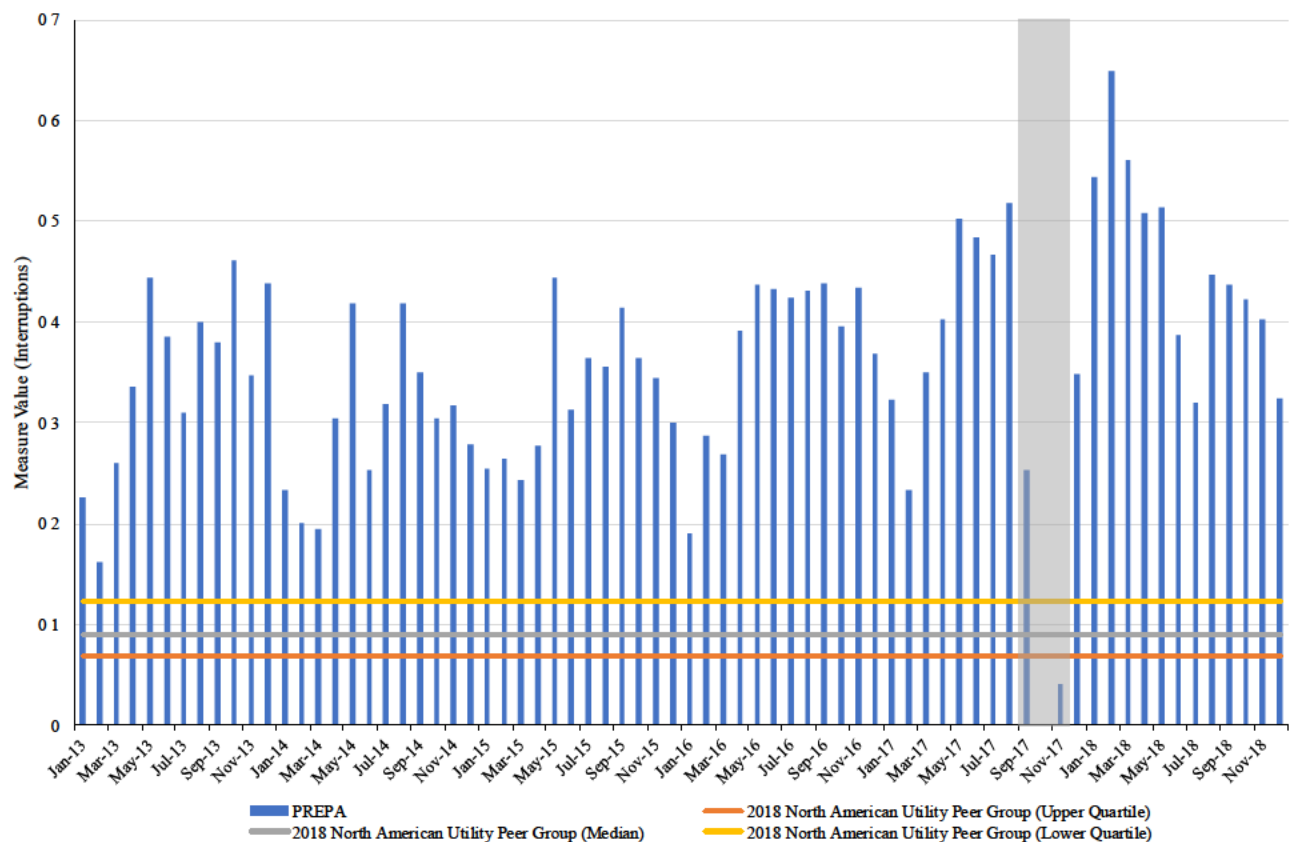
⁵⁰ In My October Report, I included the statement, "PREPA recently estimated the theft rate at 17.3 percent, which is 'higher than [the] industry average.'" The correct statement is, "PREPA recently estimated the rate of technical losses and theft at 17.3 percent, which is 'higher than [the] industry average.'" Fiscal Plan, p. 20.

⁵¹ SAIFI stands for System Average Interruption Frequency Index. SAIDI stands for System Average Interruption Duration Index. CAIDI stands for Customer Average Interruption Duration Index.

average *duration* of an outage; and CAIDI is the average *interruption duration*. The higher that SAIFI, SAIDI, and CAIDI are, generally speaking, the worse the performance of the utility is in terms of providing consistent, reliable power and responding to issues when they arise.

45. PREPA customers continue to experience outages more frequently than customers of North American utilities. Exhibit 8, below, compares PREPA's monthly SAIFI to the 2018 North American median, upper quartile, and lower quartile SAIFI. The grey portion indicates the four months immediately following Hurricane Maria.

Exhibit 8. *PREPA's SAIFI Compared to the US Median, Upper Quartile, and Lower Quartile, 2013-2018*



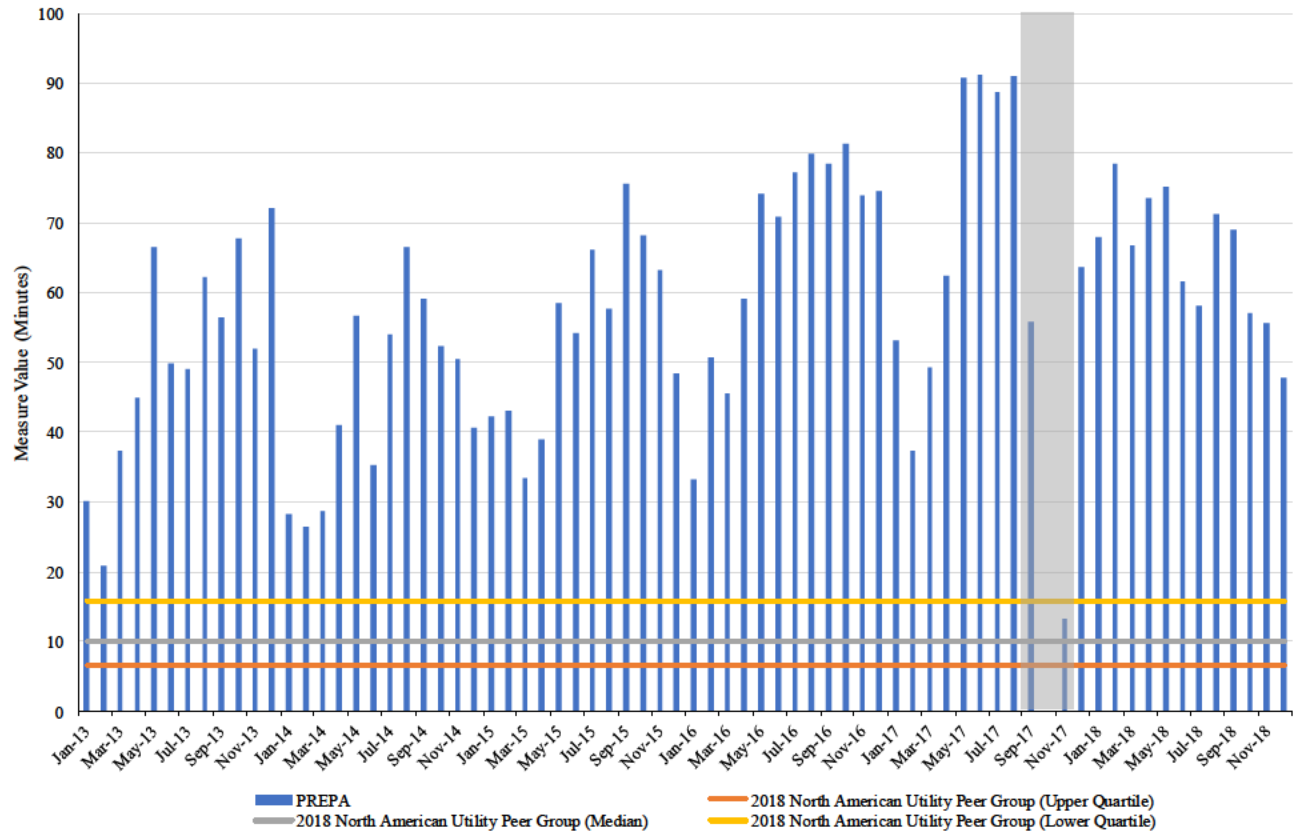
Notes and Sources:

- PREPA_LS0023778 and IEEE, "IEEE Benchmark Year 2018 - Results for 2017 Data "
- For 2018 North American Utility Peer Group, (2018 Annual SAIFI) / (12 months) values are reported
- Puerto Rico was affected by hurricanes Irma and Maria in September 2017

46. Exhibit 9, below, compares the monthly average duration of PREPA's distribution system outages to the North American median, upper quartile and lower quartile performers.

PREPA's average duration of outages continues to be frequently worse than the lower quartile of North American utilities.

Exhibit 9. *PREPA's SAIDI Compared to the US Median, Upper Quartile, and Lower Quartile, 2013-2018*

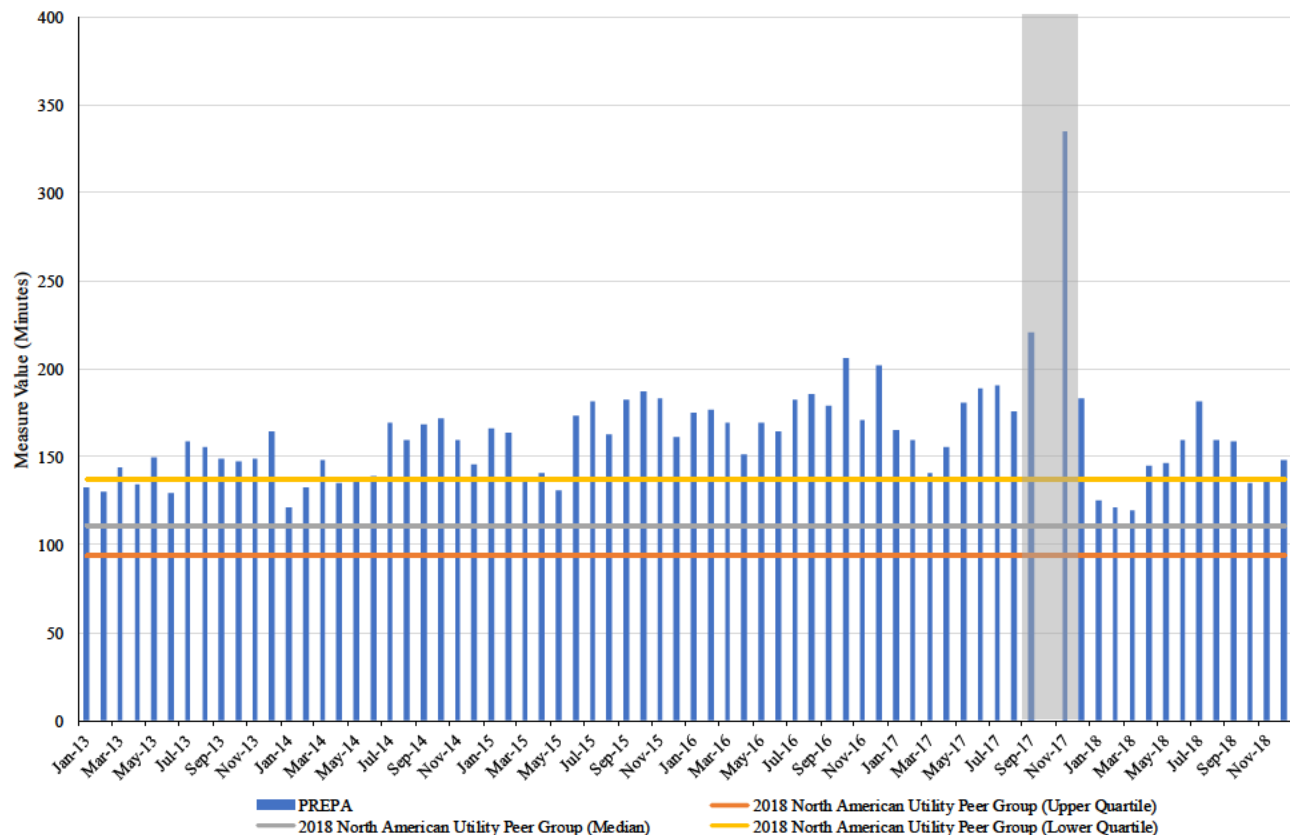


Notes and Sources:

- PREPA LS0023778 and IEEE, "IEEE Benchmark Year 2018 - Results for 2017 Data"
- For 2018 North American Utility Peer Group, (2018 Annual SAIDI) / (12 months) values are reported
- Puerto Rico was affected by hurricanes Irma and Maria in September 2017

47. Finally, I compared PREPA's monthly CAIDI from January 2013 through December 2018 to the median, upper quartile, and lower quartile for North American peers in 2018. The grey portion indicates the four months immediately following Hurricane Maria. See Exhibit 10, below.

Exhibit 10. *PREPA's CAIDI Compared to the US Median, Upper Quartile, and Lower Quartile, 2013-2018*



Notes and Sources:

- PREPA_LS0023778 and IEEE, "IEEE Benchmark Year 2018 - Results for 2017 Data "
- Puerto Rico was affected by hurricanes Irma and Maria in September 2017
- CAIDI is Customer Average Interruption Duration Index and is calculated as (SAIDI) / (SAIFI)

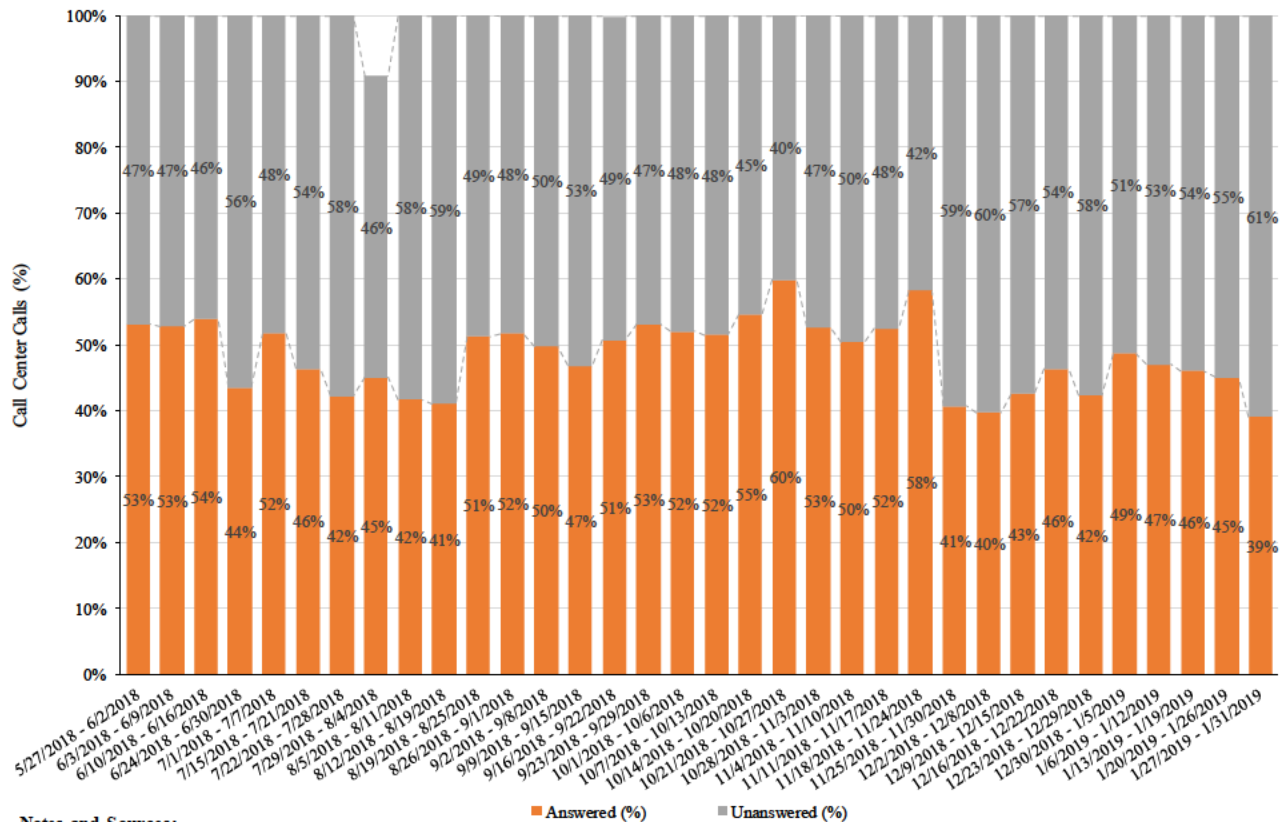
3. PREPA Continues to Mismanage Customer Service

48. As discussed in My October Report, PREPA has long needed to improve its customer service functions. Its deficient customer service functions have resulted in, for example, long customer service wait times and a high percentage of dropped calls, which leads to failure to resolve customer disputes. These issues in the customer service department contribute to PREPA's failure to receive revenue and collect outstanding bills. PREPA's billing and collections issues are discussed in more detail in My October Report and elsewhere in this declaration.

49. PREPA has not improved the number of calls that are dropped by its customer service center in Fiscal Year 2019, a very low threshold for purposes of measuring operational reform. For

example, only approximately 50 percent of the calls are answered. *See* Exhibit 11, below. Rather than hiring additional customer service representatives to address these issues, PREPA admitted in a recent filing that it “has continued to lose” such customer service personnel.⁵²

Exhibit 11. *Proportion of Answered PREPA Call Center Calls, May 2018 through January 2019*



Notes and Sources:

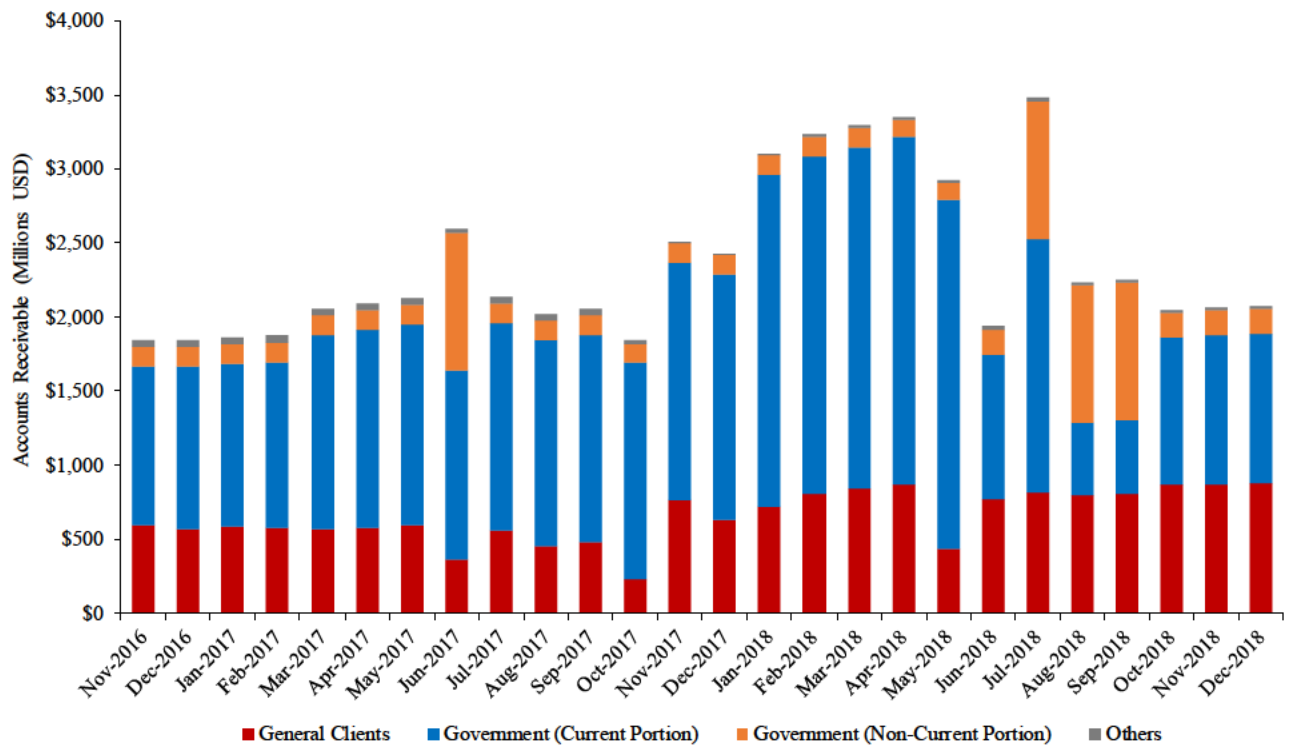
- PREPA_LS0005778, PREPA_LS0005692, PREPA_LS0011436, PREPA_LS0022242, PREPA_LS0023778 and PREPA_LS0066397
 - Data for dates 6/17/2018 - 6/23/2018, 7/8/2018 - 7/14/2018, 9/30/2018 and 12/1/2018 are missing The 8/19/2018 date is included for both periods 8/12/2018 - 8/19/2018 and 8/19/2018 - 8/25/2018

4. PREPA Continues to Mismanage Collection Practices

50. My October Report detailed PREPA’s high accounts receivable balance. Since that time, PREPA’s “General Clients” accounts receivable balance has continued to increase. *See* Exhibit 12, below.

⁵² CEPR-AP-2015-0001, “PREPA’s Verified Motion for Extension of Time,” November 15, 2018.

Exhibit 12. *PREPA's Account Receivables Balances, November 2016 - December 2018*



Notes and Sources:

- Data are from PREPA Monthly Reports to the Governing Board.
- June 2017 values are from June 2018 Monthly Report. June 2018 values are from December 2018 Monthly Report.
- "Others" include claims receivable from insurance companies, net advances to irrigation systems, accrued interest, and other accounts receivable.

51. Note that Exhibit 12 appears to depict a decrease in governmental accounts receivable of more than one billion dollars between July 2018 and August 2018. However, based on a review of PREPA's publicly released cash flow statements, this purported decrease does not appear to be associated with actual cash collection of anywhere near that magnitude.⁵³

5. PREPA Continues to Mismanage Contracts

52. [REDACTED]

[REDACTED]

[REDACTED]

⁵³ PREPA, "13-Week Cash Flow Updates."

⁵⁴ PREPA_LS0047128.

53. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

54. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

55. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

⁵⁵ PREPA_LS0047128.

⁵⁶ PREPA_LS0047128.

⁵⁷ PREPA_LS0047128.

⁵⁸ PREPA_LS0047128.

⁵⁹ PREPA_LS0047128.

⁶⁰ PREPA_LS0035504.

⁶¹ PREPA_LS0035504.

B. PREPA HAS EXHIBITED A PATTERN OF NON-COMPLIANCE WITH ITS REGULATORY AND OVERSIGHT AUTHORITIES

56. Since the inception of the Energy Commission (now known as the Energy Bureau), PREPA has been dismissive, defiant, and non-compliant with respect to numerous orders, information requests, and general directives across several proceedings. PREPA has also caused numerous delays ultimately leading to, in some cases, penalties, fines, and reprimands. Similarly, PREPA has also failed to report to the FOMB in a timely manner.

1. PREPA Has Resisted Timely Setting of FY2019 Rates

57. In the Energy Bureau's Final Resolution and Order in the FY2017 rate case, the Bureau adopted procedures designed to impose discipline on PREPA's spending, which included annual budget examinations starting with FY2019 and rate cases at least every three years.⁶² For the first of these annual budget examinations, the Energy Bureau initiated a proceeding, on May 4, 2018, to set new revenue requirements and rates for PREPA for FY2019.⁶³ The Energy Bureau ordered PREPA to comply with all deadlines in the proceeding, which would result in FY2019 rates being finalized by July 31, 2018.⁶⁴ Although PREPA has made several partial productions to the Energy Bureau in this FY2019 rate proceeding, PREPA has also argued that it cannot produce certain requested information and has repeatedly failed to timely comply with the Energy Bureau's information requests, which are necessary to set FY2019 rates.

58. At the outset, rather than seek to comply with the Energy Bureau's initial May 4, 2018 order to set new rates for FY2019, PREPA filed a legal brief in which it argued against the Bureau's order and instead proposed its own plan for the rate case.⁶⁵ PREPA argued that the Bureau's order and rate case was incompatible with the Fiscal Plan and "impossible or impractical in various other

⁶² CEPR-AP-2015-0001, "Final Resolution and Order," January 10, 2017, p. 149.

⁶³ CEPR-AP-2018-0002, "Resolution and Order Regarding Rates for Fiscal Year 2019," May 4, 2018, pp. 1-2.

⁶⁴ CEPR-AP-2018-0002, "Resolution and Order Regarding Rates for Fiscal Year 2019," May 4, 2018, p. 8.

⁶⁵ CEPR-AP-2018-0002, "PREPA's Verified Response and Motion Regarding May 4th Order," May 11th, 2018, p. 1.

respects.”⁶⁶ PREPA further argued, among other things, that it was inconsistent with Puerto Rico and federal law and the stated objectives of the government related to the transformation of the energy sector.⁶⁷ Essentially, PREPA attempted to dismiss the current rate case as soon as the Bureau instituted it.

59. The Energy Bureau responded by holding a technical conference on May 18, 2018.⁶⁸ As a result of the discussion during the technical conference, the Energy Bureau ordered PREPA to submit, no later than May 25, 2018, a response to each information request in the Bureau’s May 4, 2018 order.⁶⁹

60. On May 25, 2018, PREPA filed its responses, in which it claimed it would be unable to comply with certain information requirements.⁷⁰ Yet, the Bureau’s June 22, 2018 response disproved many of PREPA’s claims.⁷¹ For instance, PREPA’s claim that the personnel necessary to answer such requests were unavailable was entirely “inconsistent with the statements made by one of PREPA’s representatives at the May 18, 2018 Technical Conference.”⁷² In short, the Bureau rejected PREPA’s claims that it could not produce certain information.

61. After first resisting the rate case in its entirety and then rejecting some of the Energy Bureau’s requests, PREPA has now proceeded to request numerous time extensions. On August 10, 2018, PREPA requested that the Bureau extend the August 17, 2018 deadline for the remaining information requirements until August 31, 2018.⁷³ On August 31, 2018, PREPA requested a second

⁶⁶ CEPR-AP-2018-0002, “PREPA’s Verified Response and Motion Regarding May 4th Order,” May 11th, 2018, pp. 3-4.

⁶⁷ CEPR-AP-2018-0002, “PREPA’s Verified Response and Motion Regarding May 4th Order,” May 11th, 2018, pp. 4, 8.

⁶⁸ CEPR-AP-2018-0002, “Resolution and Order Following Technical Conference,” May 22, 2018, p. 1.

⁶⁹ CEPR-AP-2018-0002, “Resolution and Order Following Technical Conference,” May 22, 2018, p. 1.

⁷⁰ CEPR-AP-2018-0002, “PREPA’s Compliance Filing Pursuant to the Commission’s May 22, 2018 Order,” May 25, 2018.

⁷¹ CEPR-AP-2018-0002, “Resolution and Order Establishing Calendar for Submission of Information,” June 22, 2018, p. 1.

⁷² CEPR-AP-2018-0002, “Resolution and Order Establishing Calendar for Submission of Information,” June 22, 2018, p. 1.

⁷³ CEPR-AP-2018-0002, “PREPA’s (1) Compliance Filing for Items due August 10, 2018; and (2) Motion to Extend Due Date of Remaining Items,” August 10, 2018.

extension for Item A.⁷⁴ On September 17, 2018, PREPA requested a third extension.⁷⁵ In sum, PREPA has requested three separate time extensions in the current rate case and has apparently still failed to produce the remaining information requirements.

62. Though the rate case was originally scheduled for completion by July 31, 2018, the end is still not in sight nearly 9 months from when it commenced. As of the date of this declaration, PREPA has not submitted Item A. Item A, or the costs of service, is the key input to determine revenue requirements and to set rates appropriately for PREPA, such that it will receive the revenue required to cover its costs. As of the date of this declaration, revenue requirements and appropriate rates have not been determined for FY2019.

2. PREPA Has Continually Delayed Implementation of the Permanent Rate Established in 2017

63. On January 10, 2017, the Energy Bureau approved a rate structure for PREPA that was designed to generate its estimated revenue requirement at the time.

64. In addition to increasing the base rate that had not been increased since 1989, the approved permanent rate structure for PREPA modifies the treatment of CILT and subsidies, fuel costs, and purchased power costs, and also stipulates that PREPA must perform certain reconciliations that will appear on customers' monthly bills, namely reconciling the current provisional rate with the new permanent rate.

65. Historically, PREPA has recovered CILT and a group of costs and discounts, collectively referred to as subsidies, through a roughly 12 percent surcharge added to its fuel and purchased power costs.⁷⁶ The approved permanent rate structure modifies this approach and now

⁷⁴ CEPR-AP-2018-0002, "PREPA's Second Motion to Extend Due Date of Response to June 22 Order, Item A," August 31, 2018, p. 3.

⁷⁵ CEPR-AP-2018-0002, "PREPA's Third Motion to Extend Due Date of Response to June 22 Order, Item A," September 17, 2018, p. 1.

⁷⁶ CEPR-AP-2015-0001, "Final Resolution and Order," January 10, 2017, p. 130.

requires PREPA to collect any applicable CILT and subsidy charges through a separate pass-through rider.⁷⁷

66. PREPA has time and time again requested to extend the deadline to implement the approved permanent rate, with the most recent extended deadline being April 1, 2019.⁷⁸ Specifically, PREPA has requested four extensions in this proceeding, for a total of 21 months of delays.⁷⁹ In fact, because PREPA has requested so many extensions, the Energy Bureau issued a final warning to PREPA, stating that “there will be no further extensions” to the April 1, 2019 implementation deadline, and that a failure by PREPA to comply will result in fines of up to \$25,000 per day.⁸⁰

3. PREPA Has Failed to Comply with the Energy Bureau’s Orders Regarding Microgrid Regulation

67. One of PREPA’s fundamental transformation goals is to implement a microgrid electrical system. The DOE defines microgrids as “A group of interconnected loads and distributed energy resources (‘DER’) within clearly defined electrical boundaries that act as a single controllable entity with respect to the grid. A microgrid can connect and disconnect from the grid to enable it to operate in both grid-connected and island mode. A remote microgrid is a variation of a microgrid that operates in island conditions.”⁸¹ In other words, a microgrid is a smaller part of the larger electrical grid, which can “disconnect” or function independently from the rest of the grid when there are widespread transmission system outages. As part of its transformation, PREPA proposes a system of different microgrids across the island.⁸²

⁷⁷ “The Contribution in Lieu of Taxes (CILT) shall no longer be collected by PREPA via the 0.89 factor that had been in the denominator of its Fuel and Purchased Power Adjustors. Rather, CILT will be collected through a separate rider.” CEPR-AP-2015-0001, “Final Resolution and Order,” January 10, 2017, p. 132.

⁷⁸ CEPR-AP-2015-0001, “Resolution and Order,” September 28, 2018, pp. 1-2.

⁷⁹ PREPA requested extensions in the permanent rate proceeding on March 27, 2017, June 16, 2017, September 26, 2017, and November 15, 2018. *See* CEPR-AP-2015-0001, “The Puerto Rico Electric Power Authority’s (1) Draft Customer Notice and (2) Reservation of Rights,” October 15, 2018, pp. 3-5; CEPR-AP-2015-0001, “Resolution and Order,” November 28, 2018, pp. 1-2.

⁸⁰ CEPR-AP-2015-0001, “Resolution and Order,” November 28, 2018, pp. 1-2.

⁸¹ United States Department of Energy, “Energy Resilience Solutions for the Puerto Rico Grid – Final Report,” June 2018, p. 30.

⁸² Fiscal Plan, pp. 52, 75.

68. As part of developing a microgrid regulation plan, the Energy Bureau published the “Final Microgrid Regulation” on May 16, 2018.⁸³ On the same day, the Energy Bureau ordered PREPA to develop a draft regulation that governs the “interconnection of microgrid systems to Puerto Rico’s electric grid” within 120 days, i.e. by September 13, 2018.⁸⁴ This draft regulation would describe the process by which a microgrid would interconnect, or be connected to, the PREPA transmission and distribution network.

69. On September 17, 2018, PREPA filed a motion to stay or extend the due date for the draft interconnection regulation ordered by the Energy Bureau. PREPA requested that the Energy Bureau stay the May 16 Order “indefinitely” (in other words, effectively dismiss it), or extend the due date for filing to February 2019.⁸⁵ Among other purported reasons for its delay, PREPA asserted that “its serious understaffing situation affects its work.”⁸⁶

70. The Energy Bureau denied PREPA’s motion and ordered PREPA to file the requested draft on or before October 31, 2018. Associate Commissioner Angel R. Rivera de la Cruz, the only commissioner who remained from the former Energy Commission and had not been recently appointed, dissented in part and stated, “The Motion to Stay is another link in a long chain of PREPA’s non-compliance with the Energy Bureau’s orders and regulations.”⁸⁷

71. On October 31, 2018, PREPA filed a second motion to stay or extend the due date for the draft interconnection regulation. PREPA reincorporated its assertions from the September 17 motion to stay or extend.⁸⁸ PREPA also claimed it was working “very diligently” on a draft regulation, and that it was constrained by “limitations” such as “resource constraints, including loss

⁸³ CEPR-MI-2018-0001, “Resolution,” May 16, 2018.

⁸⁴ CEPR-MI-2018-0008, “Order,” May 16, 2018.

⁸⁵ CEPR-MI-2018-0001, “PREPA’s Motion to Stay or Extend Due Date for Proposed Interconnection Regulation,” September 17, 2018.

⁸⁶ CEPR-MI-2018-0001, “PREPA’s Motion to Stay or Extend Due Date for Proposed Interconnection Regulation,” September 17, 2018.

⁸⁷ CEPR-MI-2018-0001, “Associate Commissioner Angel R. Rivera de la Cruz, concurring in part and dissenting in part,” September 24, 2018.

⁸⁸ CEPR-MI-2018-0001, “PREPA’s Second Motion to Stay or Extend Due Date for Proposed Interconnection Regulation,” October 31, 2018, p. 3.

of staff, and conflicting demands in terms of its service obligations to its customers and requirements from the Fiscal Oversight and Management Board, the Government of Puerto Rico, and the Bureau.”⁸⁹

72. On November 8, 2018, the Energy Bureau ordered PREPA to provide information on “any information and/or documentation PREPA received, compiled, gathered and/or prepared with regard to the microgrid interconnection regulation on or before ten (10) days[.]”⁹⁰ The Energy Bureau noted that “PREPA seems confused regarding the microgrid definition and the purpose of the interconnection regulation.”⁹¹ The Energy Bureau also denied PREPA’s motion to extend the draft regulation due date until February 2019.

73. On December 20, 2018, the Energy Bureau ruled that PREPA had failed to comply with its orders to file a draft regulation and is therefore subject to a fine of up to \$25,000 per day. PREPA was granted 5 days to show cause for why it should not be so fined.⁹² In a December 26, 2018 brief, PREPA argued that: (1) PREPA had allegedly submitted a partial draft, (2) PREPA is submitting additional information in a “good faith effort,” (3) PREPA’s resources are engaged in “critical tasks,” and (4) past Energy Bureau orders have been “inconsistent and incomplete” as to the proposed microgrid regulation.⁹³ In that brief, PREPA also conceded that it had “struggled” to draft a microgrid interconnection regulation.

74. On January 31, 2019, the Energy Bureau entered a resolution with respect to PREPA’s brief.⁹⁴ Specifically, the Energy Bureau ruled that PREPA had not in fact previously submitted the partial draft regulation, despite PREPA’s allegations to the contrary.⁹⁵ PREPA’s partial draft

⁸⁹ CEPR-MI-2018-0001, “PREPA’s Second Motion to Stay or Extend Due Date for Proposed Interconnection Regulation,” October 31, 2018.

⁹⁰ CEPR-MI-2018-0008, “Resolution and Order,” November 8, 2018.

⁹¹ This statement that PREPA does not understand microgrids is especially important when viewed in the context of the transformation, which envisions extensive use of microgrids on the island.

⁹² CEPR-MI-2018-0008, “Order,” December 20, 2018.

⁹³ CEPR-MI-2018-0001, “Order,” December 26, 2018.

⁹⁴ CEPR-MI-2018-0008, “Resolution,” January 31, 2019.

⁹⁵ CEPR-MI-2018-0001, “Order,” January 31, 2019.

regulation was first submitted on December 26, 2018. Furthermore, in reviewing this partial draft, the Energy Bureau found it “is merely an outline of a generic regulation and does not contain any detailed information pertaining to the technical and/or operational aspects of the interconnection of microgrids.” The Energy Bureau denied PREPA’s request to dismiss the December 20, 2018 order and denied PREPA’s request to “return the task of preparing the microgrid interconnection regulation” or to delay the ongoing microgrid interconnection regulation case.⁹⁶

75. In sum, PREPA continues its track record of non-compliance with the Energy Bureau’s orders and is not on track to timely develop a critical prerequisite for microgrid development, even though this is a fundamental part of its transformation and Puerto Rico’s energy policy.

4. PREPA Failed to Timely Develop and File an IRP

76. An Integrated Resource Plan (“IRP”) is a strategy to supply forecasted energy requirements using both supply- and demand-side resources to ensure cost-effective and reliable service to customers. IRP requirements and scope vary, but IRPs use a long-term planning horizon—usually ten to twenty years. The delays in issuing PREPA’s IRP have put PREPA’s long-term strategies at risk, in turn jeopardizing any future benefits to its customers.

77. On May 29, 2018, the Energy Bureau ordered PREPA to file an updated IRP by October 31, 2018.⁹⁷ Then, on September 25, 2018, PREPA asserted that “the 2018 IRP will not and cannot be completed in October 2018,” purportedly as a result of the Energy Bureau adding more “scenarios plus other requirements to the IRP.”⁹⁸ On September 28, 2018, the Energy Bureau ordered PREPA to propose an IRP submission timeline within 15 days.⁹⁹

⁹⁶ CEPR-MI-2018-0008, “Resolution,” January 31, 2019, p. 2.

⁹⁷ CEPR-AP-2018-0001, “Order,” May 29, 2018.

⁹⁸ CEPR-AP-2018-0001, “PREPA’s (1) Compliance with the Energy Bureau’s September 5th and 18th Orders and (2) Informative Motion Regarding IRP Timeline,” September 25, 2018, ¶¶ 11-12.

⁹⁹ CEPR-AP-2018-0001, “Resolution and Order,” September 28, 2018.

78. PREPA proposed that it would submit a preliminary IRP report by the end of November 2018 and a final report on January 21, 2019.¹⁰⁰ The Energy Bureau then adopted PREPA's proposed timeline.¹⁰¹ Nevertheless, on January 22, 2019 – the day after the final IRP was due based on PREPA's own extended timeline – PREPA requested yet another extension for the final IRP until February 12, 2019.¹⁰² PREPA claimed that some of the analysis was incomplete “despite [] diligent efforts,” and represented that “PREPA has chosen the proposed February 12 date based on careful consideration of the remaining tasks, with the intention of avoiding any further motion for an extension of time.”¹⁰³ Along with this request for extension, PREPA filed preliminary and incomplete IRP materials, but it failed to include PREPA's proposed action plan, direct testimony, and other supporting documents essential to the IRP process.¹⁰⁴ On January 25, 2019, the Energy Bureau granted PREPA's second proposed due date of February 12, 2019.¹⁰⁵

79. Nevertheless, on February 11, 2019, PREPA requested yet another extension for submitting the final IRP. In response, the Energy Bureau fined PREPA \$5,000 for non-compliance. The order stated, in part, “PREPA's inability to submit a complete IRP on time and its numerous delays caused by its inadequate time management, may undermine stakeholders' and investors' trust, putting at risk the access to the funds needed to implement the IRP. Furthermore, every day PREPA delays the IRP's submission, it jeopardizes the benefits of having in place a comprehensive planning tool for the benefit of its customers.”¹⁰⁶

¹⁰⁰ CEPR-AP-2018-0001, “PREPA's Compliance with the Energy Bureau's September 28th Order,” Puerto Rico Electric Power Authority, October 15, 2018.

¹⁰¹ CEPR-AP-2018-0001, “Resolution and Order,” November 6, 2018.

¹⁰² CEPR-AP-2018-0001, “The Puerto Rico Electric Power Authority's Motion for a Limited Extension of Time,” January 22, 2019, ¶¶ 5, 8.

¹⁰³ CEPR-AP-2018-0001, “The Puerto Rico Electric Power Authority's Motion for a Limited Extension of Time,” January 22, 2019.

¹⁰⁴ CEPR-AP-2018-0001, “The Puerto Rico Electric Power Authority's Motion for a Limited Extension of Time,” January 22, 2019.

¹⁰⁵ CEPR-AP-2018-0001, “Resolution,” January 25, 2019.

¹⁰⁶ CEPR-AP-2018-0001, “Resolution and Order,” February 12, 2019.

80. Finally, on February 13, 2019—over three months after the original due date—PREPA filed before the Energy Bureau its IRP.¹⁰⁷

81. In sum, PREPA repeatedly missed its own suggested extended due dates and fell more than three months behind the original IRP schedule set by the Energy Bureau. As stated by the Energy Bureau, the delays in filing the IRP have jeopardized PREPA's ability to coordinate its long-term strategy and to transform the power sector. I am continuing to review the voluminous and recent IRP filings, and I reserve the right to supplement or modify my opinions based on such review.

5. PREPA Failed to Comply with the Approved IRP

82. Even while preparation of the IRP was ongoing, PREPA proceeded with generation resource decisions that should have been considered in the context of the IRP, but were not.

83. On July 30, 2018, PREPA issued an RFP for conversion and providing fuel to San Juan Units 5 and 6.¹⁰⁸ Two weeks later, on August 14, the Energy Bureau found that this RFP did not follow the September 23, 2016 IRP (i.e., the approved IRP), because PREPA had not submitted the RFP to the Energy Bureau for review. Additionally, the approved IRP did not seek to convert these units in this manner. The Energy Bureau ordered PREPA to provide documentation on the RFP as well as analysis to show that the proposed conversion is the least-cost option and in the best interest of the public.¹⁰⁹ The Energy Bureau also stated that PREPA did not inform the Energy Bureau of its plans, did not provide the RFP, and “nor has PREPA offered any explanation for these actions, which do not comply with the approved IRP and the approved Action Plan.”¹¹⁰

84. On November 21, 2018, a majority of the Energy Bureau nonetheless determined that PREPA could continue with the RFP process under several conditions.¹¹¹ However, one of the five

¹⁰⁷ CEPR-AP-2018-0001, “Resolution and Order,” February 15, 2019, p. 1.

¹⁰⁸ CEPR-AI-2018-0001, “Motion in Order Compliance,” August 16, 2018.

¹⁰⁹ CEPR-AI-2018-0001, “Resolution and Order,” August 14, 2018.

¹¹⁰ CEPR-AI-2018-0001, “Resolution and Order,” August 14, 2018.

¹¹¹ CEPR-AI-2018-0001, “Resolution and Order,” November 21, 2018.

Energy Bureau commissioners, Angel R. Rivera de la Cruz, wrote a dissenting opinion.¹¹² He wrote that PREPA's analysis of the San Juan conversion was evaluated as a single resource and "detached" from the IRP process, which "goes against these best regulatory and resource planning practices and may result in a more expensive system over the planning horizon."¹¹³ He also observed that "PREPA's fragmented approach to resource analysis and acquisition is what the public policy of integrated resource planning seeks to avoid."¹¹⁴ Properly conducted and sequenced IRP planning is important because it dictates the future planning and strategy for the entire electrical system.

85. On December 26, 2018, PREPA submitted the proposed contract to the Energy Bureau for review and approval,¹¹⁵ and a majority of the Energy Bureau approved the contract on January 25, 2019. Associate Commissioner Angel R. Rivera de la Cruz again wrote a dissenting opinion, reiterating that the RFP process "for the proposed conversion of San Juan Units 5 and 6 doesn't comply with the public policy on energy regarding integrated resource planning." He raised additional issues, such as compliance with Act 83 and Act 57-2014, inconsistency with original conversion cost estimates, and potential inconsistency with the 1974 Bondholder Trust Agreement.¹¹⁶

6. PREPA Failed to Comply with the FOMB's Reporting Requirements

86. PREPA has also fallen behind schedule in its reporting requirements to the FOMB, as documented by letters from the FOMB. PREPA is required to submit reports to the FOMB comparing its budget-to-actual revenues and expenditures for each fiscal year. These reports, which are used to identify deviations from the budget in order to hold government entities accountable, are due within 15 days after the last day of each quarter.

¹¹² CEPR-AI-2018-0001, "Resolution and Order," November 21, 2018.

¹¹³ CEPR-AI-2018-0001, "Associate Commissioner Angel R. Rivera de la Cruz, dissenting," November 21, 2018, p. 1.

¹¹⁴ CEPR-AI-2018-0001, "Associate Commissioner Angel R. Rivera de la Cruz, dissenting," November 21, 2018, p. 3.

¹¹⁵ CEPR-AI-2018-0001, "Resolution and Order," January 25, 2019.

¹¹⁶ CEPR-AI-2018-0001, "Associate Commissioner Angel R. Rivera de la Cruz, dissenting," January 25, 2019.

87. On December 3, 2018, the FOMB sent a letter to Governor Rosselló, citing failures of the Commonwealth government to fulfill its reporting obligations under PROMESA.¹¹⁷ With respect to PREPA, it had failed to submit a report to the FOMB comparing the budget-to-actual revenues and expenditures for Fiscal Year 2018 and the first quarter of Fiscal Year 2019.

88. On January 14, 2019, the FOMB again wrote to the Governor to reiterate that “As of today, we still have not received Section 203(a) budget to actual reports ... for PREPA ... for fiscal year 2018 or for first quarter of fiscal year 2019.”¹¹⁸ The letter also included a reminder that the reports for the second quarter of Fiscal Year 2019 were due the following day, January 15, 2019.¹¹⁹

89. Separately, a November 19, 2018 letter detailing the status of ongoing discovery and document production acknowledges that there are no audited PREPA financials for Fiscal Years 2016 – 2018.¹²⁰ A letter from December 6, 2018 claims that audited financials for Fiscal Year 2015 – 2016 will be completed by the end of calendar year 2018, and audited financials for Fiscal Year 2016 – 2017 will be completed by April 2019—i.e., between two and three years after the fact.¹²¹

90. As of the date of this declaration, PREPA has not completed an audited financial report for the fiscal year ended June 30, 2016 or any of the following fiscal years.

¹¹⁷ Financial Oversight and Management Board for Puerto Rico, Letter to Honorable Ricardo A. Rossello Nevares, December 3, 2018.

¹¹⁸ Financial Oversight and Management Board for Puerto Rico, Letter to Honorable Ricardo A. Rossello Nevares, January 14, 2019.

¹¹⁹ There is a potential discrepancy between PREPA’s dating of these budget-to-actual reports as produced in this litigation, and the FOMB’s description in its January 14, 2019 letter. Regardless of the source of this discrepancy, PREPA appears to have been late in providing some or all of these reports to the FOMB, even considering the earlier dates indicated in the copies produced in this litigation.

¹²⁰ Margaret Dale and Elizabeth L. McKeen, Re: PREPA, 17-BK-4780-LTS: Lift Stay Motion – Document Requests, November 19, 2018.

¹²¹ Margaret Dale and Elizabeth L. McKeen, Re: PREPA, 17-BK-4780-LTS: Lift Stay Motion – Document Requests, December 6, 2018.

C. PREPA CONTINUES TO BE POLITICIZED

1. The Role of Trust Employees

91. It is my understanding that “Trust employees” are a special category of employees who are affiliated with the governing political party. Unlike “career employees,” Trust employees are not selected solely based on their qualifications, but are instead appointed in large part based on political allegiance.

92. According to the Government of Puerto Rico Human Resources Administration and Transformation Act, Act 8-2017 (“Act 8-2017”) Trust employees “substantially participate in policymaking, or [] advise or render services directly to the head of the agency.”¹²²

93. The responsibilities of Trust employees are further delineated to include: [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

94. However, as I detail below, PREPA’s Trust employees permeate its workforce, contributing to its high employee turnover, nonperformance, instability, disruption to operations, and politicization that characterizes PREPA’s organizational culture and leadership.

2. PREPA’s Workforce Includes Numerous Trust Employees

95. As of December 2018, PREPA had [REDACTED] Trust employees.¹²⁴ This means that either: (i) there was a disproportionately large number of PREPA employees participating in political roles (per the statutory definition of Trust employees), or (ii) there was a disproportionately large number of employees at PREPA who were not functioning in a typical Trust employee role and who owed their role in part to their affiliation with the Governor’s political party, in contrast to meritocratic

¹²² Act 8-2017, Section 8.1.

¹²³ See PREPA_LS0012650, PREPA_LS0013262, and PREPA_LS0036068.

¹²⁴ PREPA_LS0023808.

career employees. The former would help explain PREPA's bureaucratic inertia and ineffective decision-making; the latter would help explain the thorough politicization of the organization.

96. My October Report documented PREPA's issues with Trust employees. While typical public utilities might have some top management employees appointed by political officials in certain select offices, at PREPA, Trust employees pervade all levels of the organization, creating an environment that results in politicized decision-making, high turnover every new administration, and institutional inefficiencies.¹²⁵

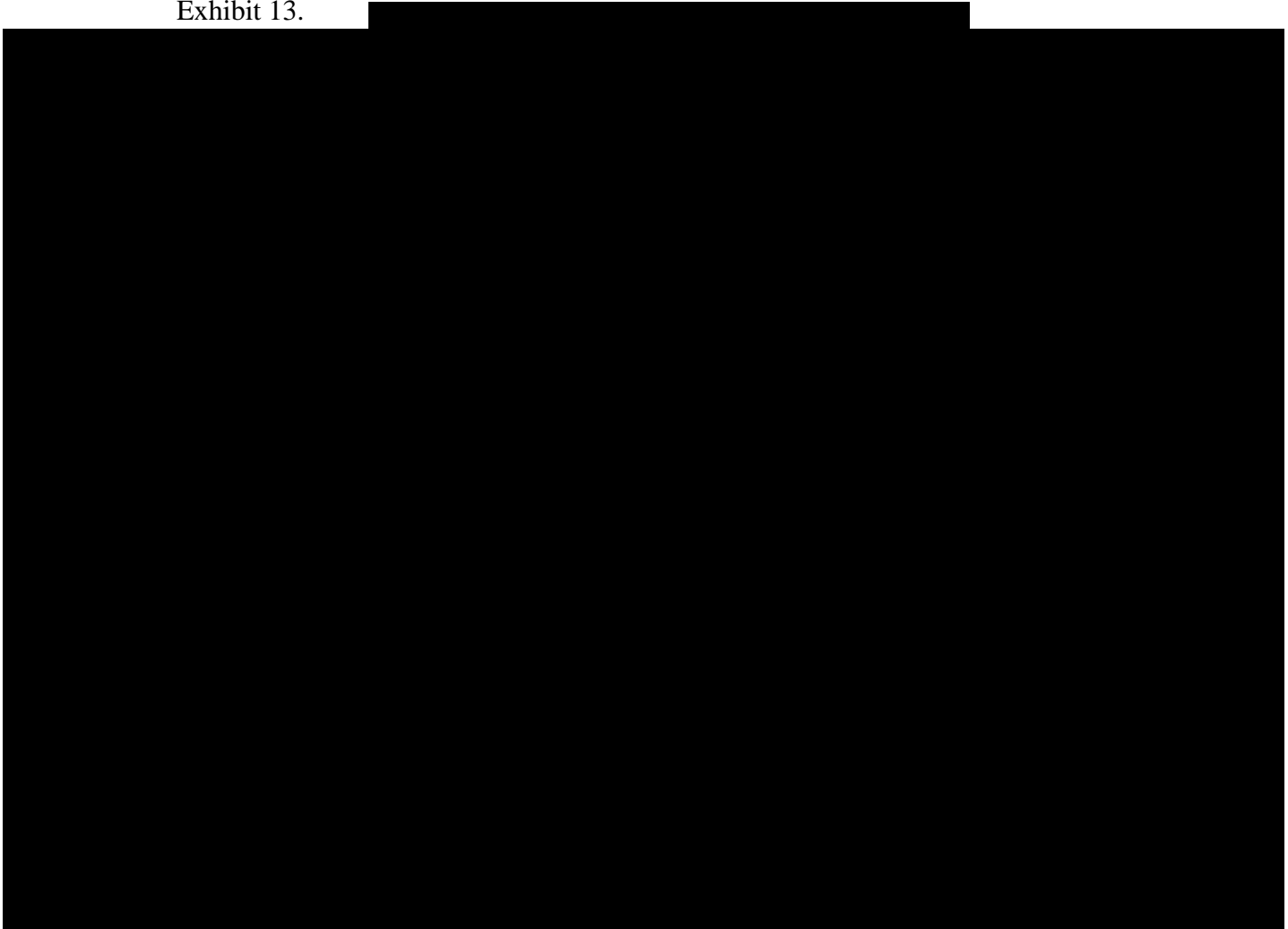
97. Even though the Trust employee system is identified as a problem for PREPA's operations, [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] Exhibit 13, below, shows the percentage of Trust employees as a percentage of overall PREPA employees over this period.


¹²⁵ Kobre & Kim LLP, "The Financial Oversight & Management Board for Puerto Rico: Independent Investigator - Final Investigative Report," August 20, 2018, p.113.

¹²⁶ PREPA_LS0025115 and PREPA_LS0020369.

¹²⁷ PREPA_LS0025115 and PREPA_LS0020369.

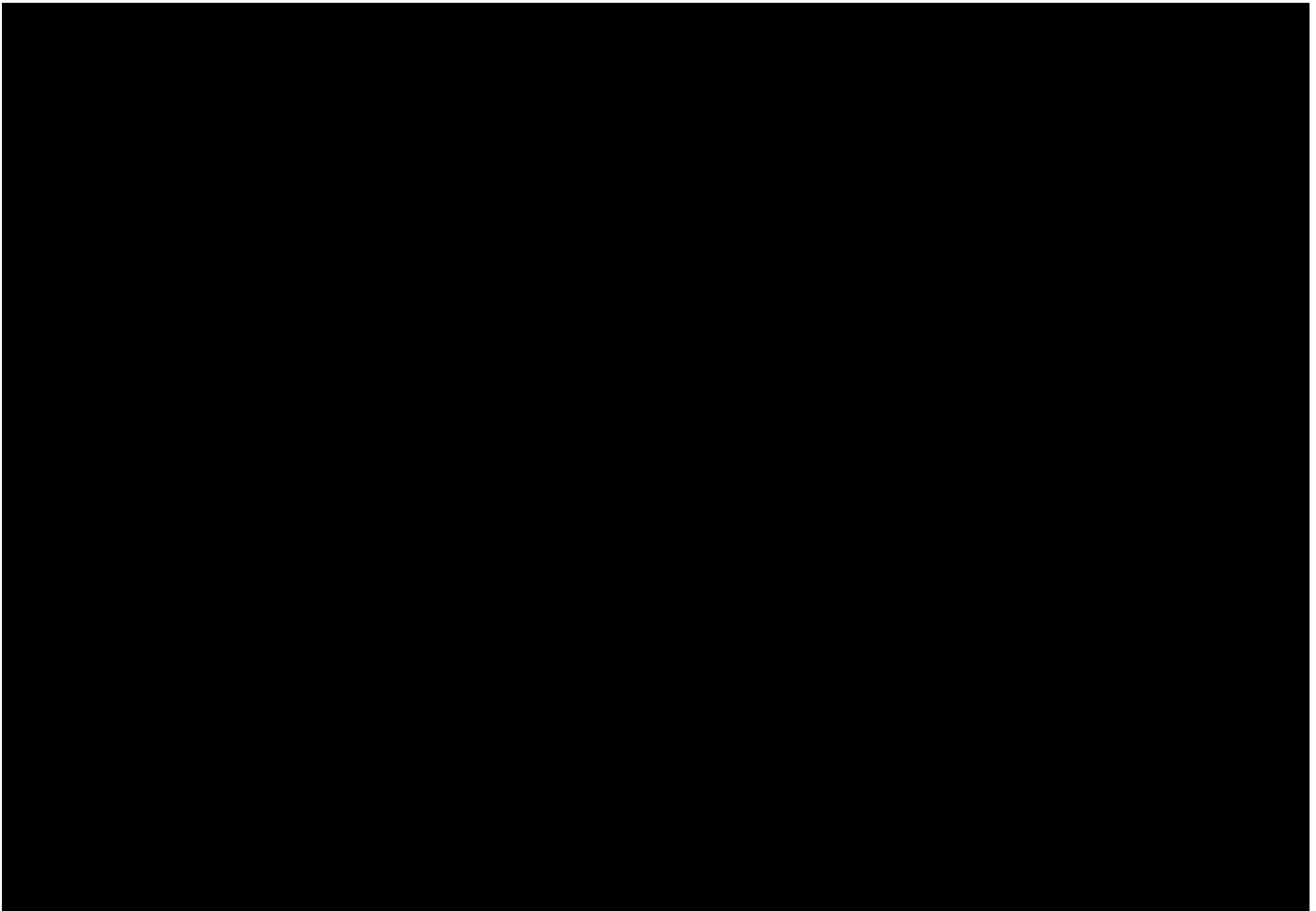
Exhibit 13.



98. 98Exhibit 14, below, shows the composition of the Trust employees by department between June 2016 and September 2018. 

ó.

Exhibit 14. [REDACTED]



99. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] ¹²⁸.

100. [REDACTED]

[REDACTED]

[REDACTED]

¹²⁸ PREPA_LS0023788 and PREPA_LS0020369.

[REDACTED]

101. [REDACTED]

[REDACTED]

Exhibit 15. [REDACTED]

[REDACTED]

102. I then further examined the roles of Trust employees within the Generation and Transmission & Distribution directorates. Generation and Transmission & Distribution are important and inherently technical directorates.

¹²⁹ PREPA_LS0000024 – 37.

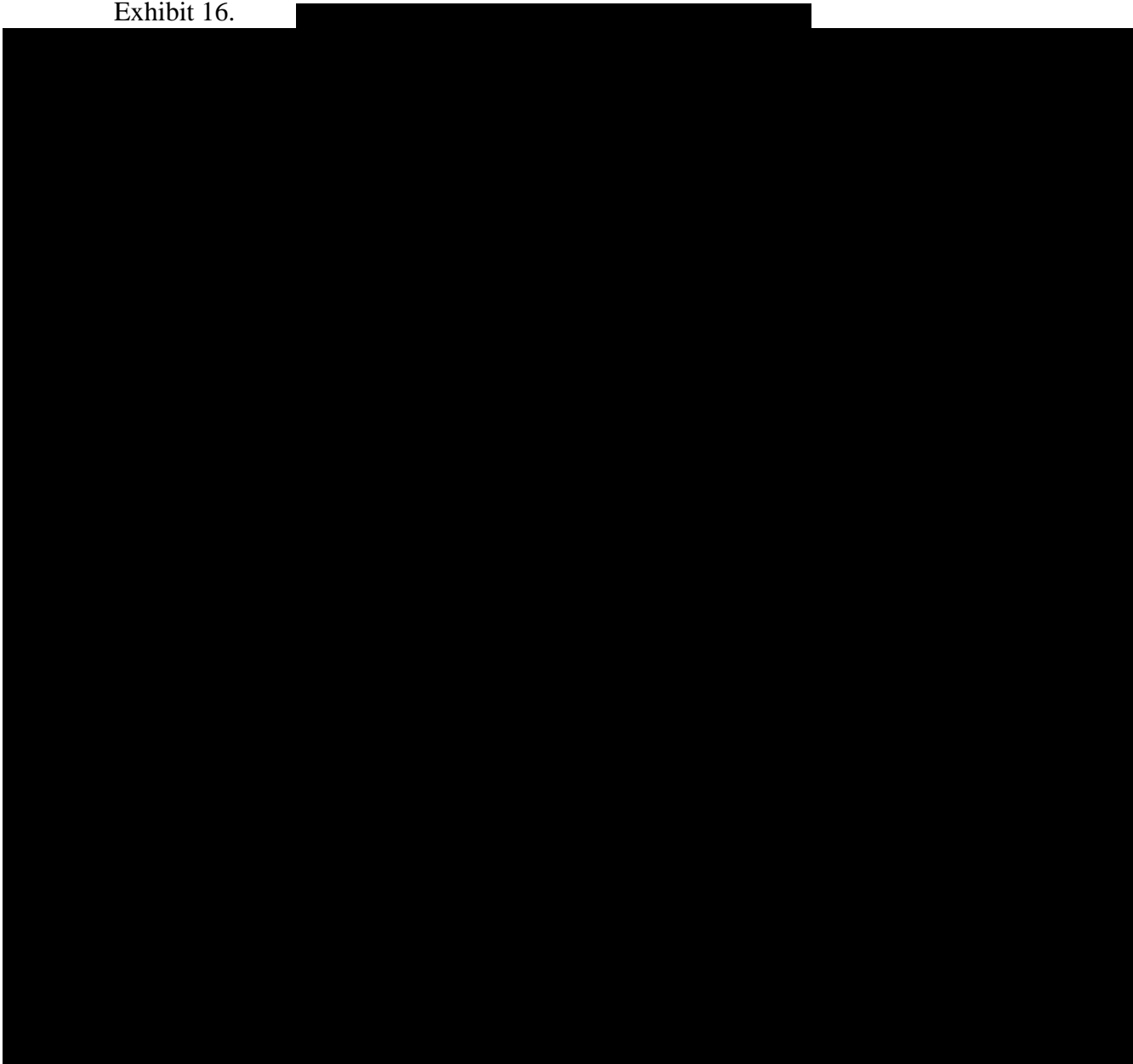
¹³⁰ PREPA_LS0023808.

¹³¹ PREPA_LS0024995 and PREPA_LS0023808.

103.

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] See Exhibit 16, below. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Exhibit 16.



104. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

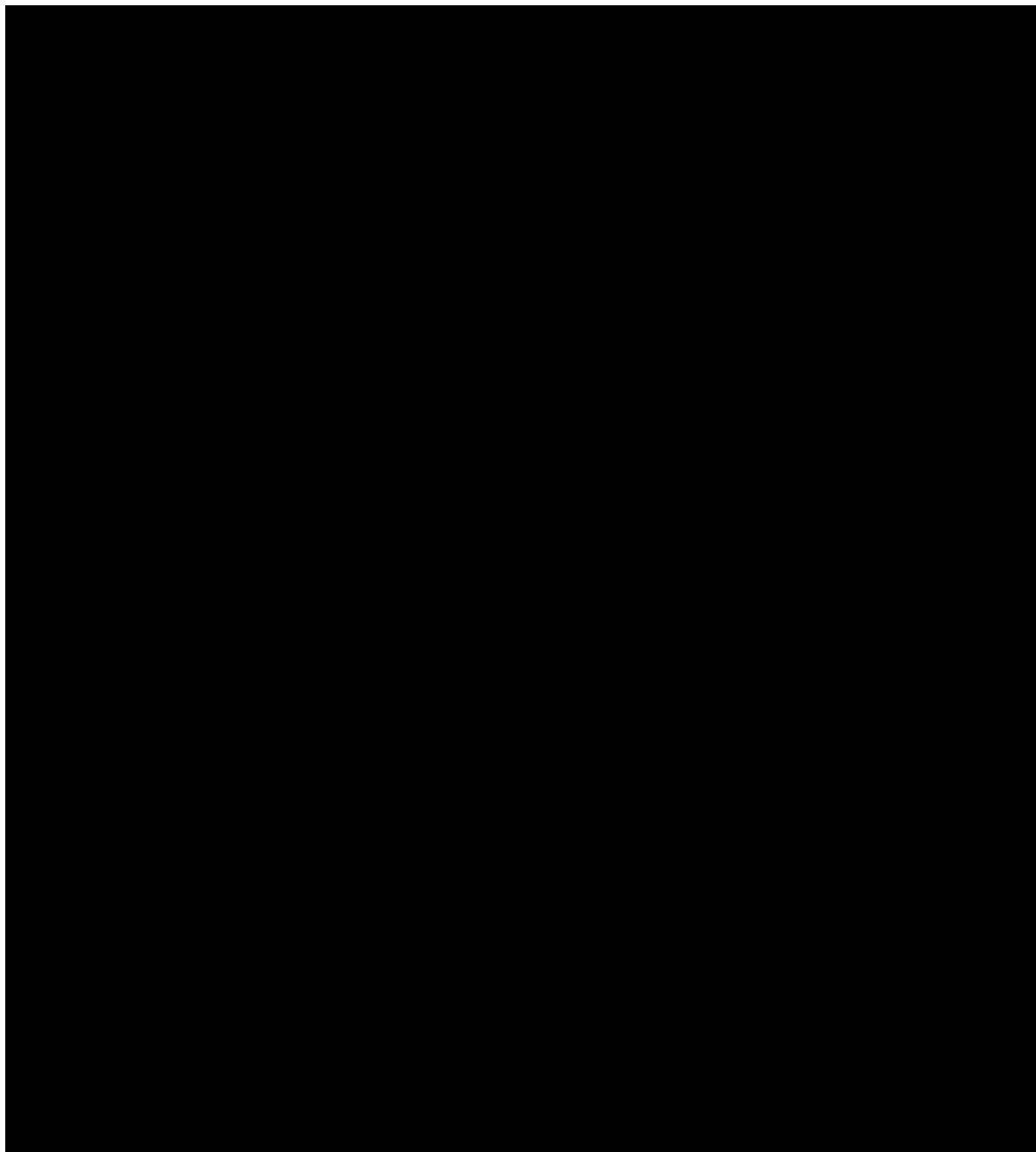
[REDACTED] See Exhibit 17, below. [REDACTED]

[REDACTED]

[REDACTED]

Exhibit 17.

[REDACTED]



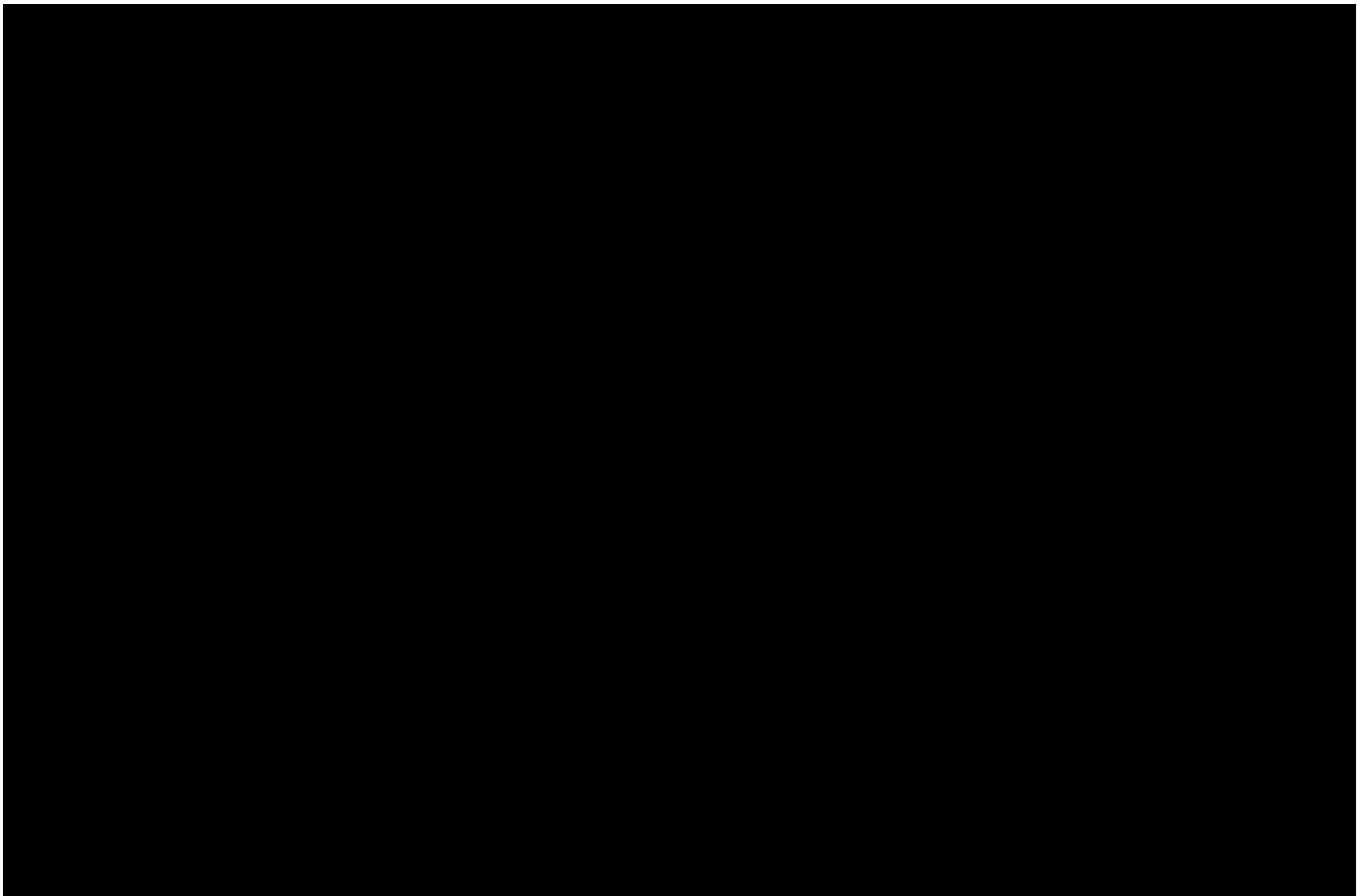
105. To understand the effect of the Trust system on employee turnover, I examined the tenure of the 2016 Trust employees in their positions, as 2016 was the last full year of the previous gubernatorial administration.

106. I first examined the year when the 2016 trust employees started in their current positions. [REDACTED]

[REDACTED]

[REDACTED]. See Exhibit 18 below.

Exhibit 18. [REDACTED]



107. I then examined when the 2016 Trust employees left their positions. [REDACTED]

[REDACTED]

[REDACTED]

108. The Trust employee system also leads to employees rotating between Trust positions and lower-level or career positions, depending upon which party is in Puerto Rico's gubernatorial office. As just one example, [REDACTED]

[REDACTED]

109. As another example, [REDACTED]

[REDACTED]

110. To summarize, My October Report documented that PREPA's Trust employee system creates a large class of employees who are politically beholden to the gubernatorial administration and its priorities. These employees generally turn over every four years, if not more often, which creates management and strategic instability and operational inefficiencies. In this declaration, I have documented that PREPA's Trust employee problem continues unabated. Almost all current Trust

¹³² PREPA_LS0010625 – 643.

¹³³ PREPA_LS0019990.

¹³⁴ PREPA_LS0006095 - 099. In Spanish, the title is "Jefe Division – Conservacion Electrica y Proteccion del Sistema Electrico." See, PREPA_LS0004093 - 106.

¹³⁵ PREPA_LS0010644 - 666. In Spanish the title is "Ingeniero Jefe – Departamento de Pruebas de Aceptacion."

¹³⁶ In Spanish the title is "Ingeniero Jefe – Departamento de Pruebas de Aceptacion" PREPA_LS0010644.

employees were not in their positions prior to the Rosselló administration. In fact, a number of top employees turned over even during the course of 2018. Further, there are now more Trust employees than there were in 2016, even as PREPA's overall headcount has *decreased*. [REDACTED]

[REDACTED] PREPA's continued issues with Trust employees demonstrate its lack of commitment to serious reform, its inability to execute, its inability to maintain leadership stability, and its continuing politicization.

111. The Trust employee system also likely hampered PREPA's ability to implement previous operational initiatives. As discussed above, in February 2017, AlixPartners identified a number of operational improvements that PREPA could implement in its "Hand-over Strategy."¹³⁸ For many of the initiatives, AlixPartners designated and trained a PREPA employee to manage the initiative after AlixPartners left.

112. I identified 38 workstreams from AlixPartners. For these workstreams, I identified a total of 30 named individuals placed in charge of the initiatives (note that some people were placed in charge of more than one initiative). Of those 30 individuals, [REDACTED]

[REDACTED]
[REDACTED] [REDACTED] [REDACTED]
[REDACTED]
[REDACTED] Exhibit 19, below, [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

¹³⁷ PREPA_LS0024995 and PREPA_LS0023808.

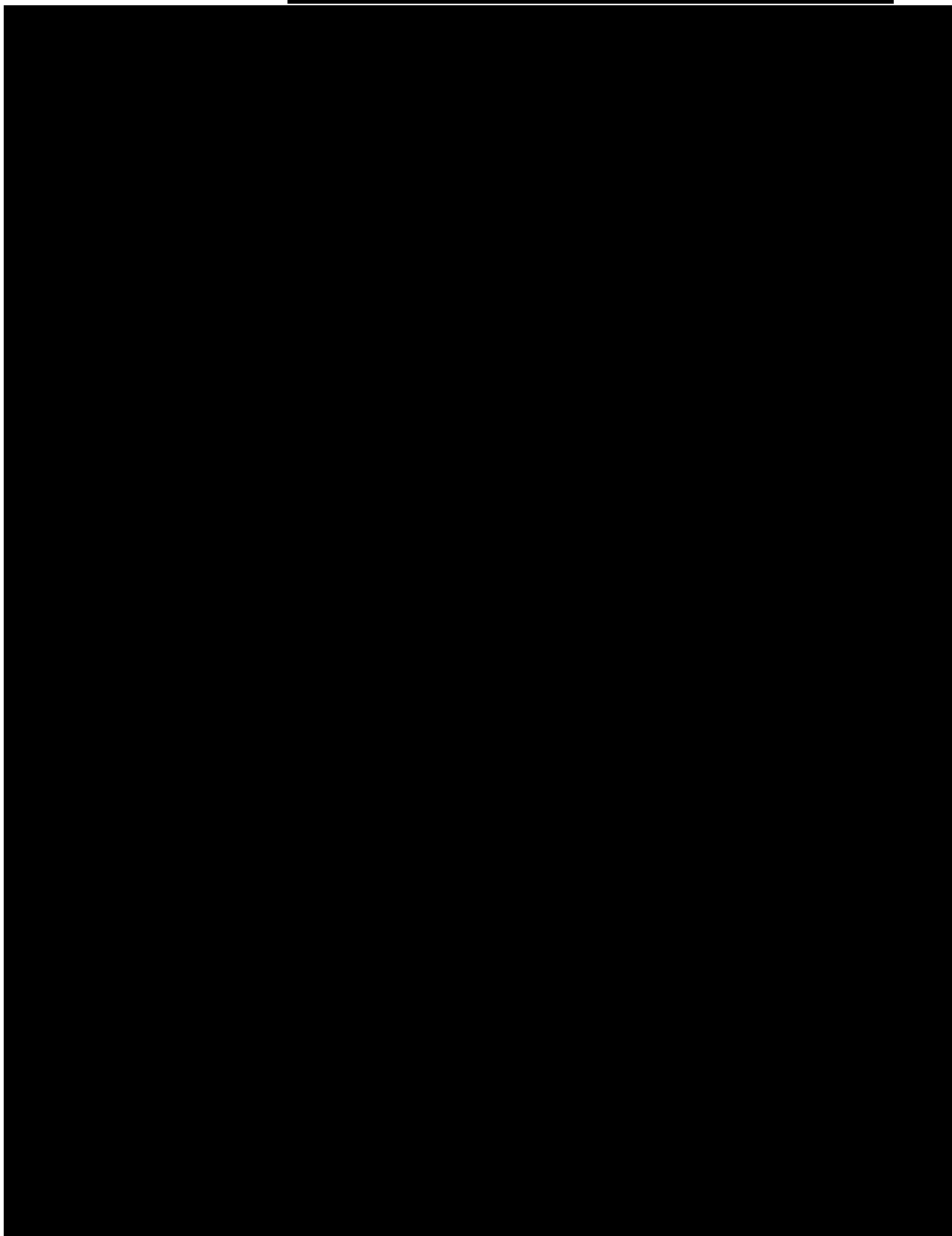
¹³⁸ AlixPartners, "AlixPartners' Hand-Over Strategy Presentation to the Governing Board," February 1, 2017.

¹³⁹ PREPA_LS0010644.

¹⁴⁰ The other individual was removed from his position in November 2017.

Exhibit 19.

[REDACTED]



113. I then analyzed the PREPA employees in leadership roles in the current Fiscal Plan operational initiatives, as identified in PREPA's February status reports. See Exhibit 20 . [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Exhibit 20. [REDACTED]

[REDACTED]

[REDACTED]

3. Politicization Also Affects PREPA's Contractors

114. Nelson Diaz, former executive at Exelon and a member of the PREPA Board in 2017, described the politicization of PREPA during his tenure. This politicization included sweetheart deals

for friends of the Governor,¹⁴¹ appointment of friends of the Executive Director to high-level roles within PREPA,¹⁴² and a prevailing culture of politicization, indifference, and favor trading.¹⁴³

115. Documents produced in this litigation also illustrate the political influence upon PREPA's other hiring decisions. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

D. THE STATUS QUO IS INADEQUATE

116. PREPA, through its recent history, has exhibited management deficiencies related to basic utility operations. These deficiencies do not bode well for PREPA's ability to implement and execute on the complex strategy laid out by the Fiscal Plan. PREPA has tried to address these operational inefficiencies by importing the expertise of consultants, at a significant cost to PREPA's stakeholders. However, PREPA has generally failed to execute the recommendations from its consultants, both past and present.

¹⁴¹ "I opposed the method of awarding contracts without requests for proposal, and pushed back against what seemed like sweetheart deals for friends of the new governor's administration." Nelson A. Diaz, *Not from Here, Not from There*, 2018, p. 229.

¹⁴² "The executive director wanted his friend to be the deputy director, even though he appeared corrupt and was alleged to have bribed a few officials to win the executive director's wife a seat on the court." Nelson A. Diaz, *Not from Here, Not from There*, 2018, p. 229.

¹⁴³ "Running up against people, time and again, with the authority to make real and important changes—changes that can profoundly help the vulnerable—who think first in terms of what will least inconvenience or annoy their unaffected friends and who become preoccupied with the politics of reward and returned favors can be disillusioning." Nelson A. Diaz, *Not from Here, Not from There*, 2018, p. 230.

¹⁴⁴ [REDACTED] PREPA_LS0047128-30.

1. The History of PREPA and Current Results Speak for Themselves

117. PREPA has hired numerous outside advisors and consultants. An analysis of their fee applications indicates that PREPA has paid significantly for the work of its advisors, including Ankura, Citigroup, Filsinger Energy Partners, McKinsey, and Rothschild. Exhibit 21 below is a summary of the amount paid to PREPA's advisors.

Exhibit 21. *Summary of Recently Paid Fees to Outside Advisors and Consultants*

Advisor (1)	Fee Application (2)	Period (3)	Compensation Sought (4)	Expense Reimbursement Sought (5)	Total (6) = (4) + (5)
Ankura Consulting Group, LLC	First Interim Fee Application	July 2, 2017 - September 30, 2017	\$ 2,260,252 50	\$ 129,303 57	\$ 2,389,556 07
Ankura Consulting Group, LLC	Second Interim Fee Application	October 1, 2017 - January 31, 2018	3,475,283 50	153,684 90	3,628,968 40
Ankura Consulting Group, LLC	Third Interim Fee Application	February 1, 2018 - May 31, 2018	3,325,832 00	261,639 11	3,587,471 11
Ankura Consulting Group, LLC	Fourth Interim Fee Application	June 1, 2018 - September 30, 2018	2,779,593 00	216,596 27	2,996,189 27
Subtotal			\$ 11,840,961.00	\$ 761,223.85	\$ 12,602,184.85
Citigroup Global Markets Inc	First Interim Fee Application ¹	January 27, 2017 - January 31, 2018	\$ 0 00	\$ 0 00	\$ 0 00
Citigroup Global Markets Inc	Second Interim Fee Application ¹	February 1, 2018 - May 31, 2018	1,600,000 00	0 00	1,600,000 00
Citigroup Global Markets Inc	Third Interim Fee Application ¹	June 1, 2018 - September 30, 2018	1,600,000 00	0 00	1,600,000 00
Subtotal			\$ 3,200,000.00	\$ 0.00	\$ 3,200,000.00
Filsinger Energy Partners, Inc	First Interim Fee Application	December 7, 2017 - January 31, 2018	\$ 2,326,893 30	\$ 201,691 48	\$ 2,528,584 78
Filsinger Energy Partners, Inc	Second Interim Fee Application	February 1, 2018 - May 31, 2018	5,072,116 80	333,333 15	5,405,449 95
Filsinger Energy Partners, Inc	Third Interim Fee Application	June 1, 2018 - September 30, 2018	4,658,183 60	343,922 99	5,002,106 59
Subtotal			\$ 12,057,193.70	\$ 878,947.62	\$ 12,936,141.32
McKinsey & Company, Inc	First Interim Fee Application ²	July 1, 2017 - September 30, 2017	\$ 1,480,000 00	\$ 0 00	\$ 1,480,000 00
McKinsey & Company, Inc	Second Interim Fee Application ³	October 1, 2017 - January 31, 2018	2,960,000 00	0 00	2,960,000 00
McKinsey & Company, Inc	Third Interim Fee Application ³	February 1, 2018 - May 31, 2018	2,960,000 00	0 00	2,960,000 00
McKinsey & Company, Inc	Fourth Interim Fee Application ³	June 1, 2018 - September 30, 2018	2,960,000 00	0 00	2,960,000 00
Subtotal			\$ 10,360,000.00	\$ 0.00	\$ 10,360,000.00
Rothschild Inc	First Interim Fee Application ⁴	April 1, 2018 - May 31, 2018	\$ 400,000 00	\$ 0 00	\$ 400,000 00
Rothschild Inc	Second Interim Fee Application ⁴	June 1, 2018 - September 30, 2018	800,000 00	0 00	800,000 00
Subtotal			\$ 1,200,000.00	\$ 0.00	\$ 1,200,000.00
Total			\$ 38,658,154.70	\$ 1,640,171.47	\$ 40,298,326.17

Notes and Sources:

¹ Citigroup's Second Interim Fee Application says an engagement letter from February 2018 provides a \$400,000 per month fee for "services rendered on PREPA's behalf " Therefore, we assume no PREPA-related fees for the First Interim Fee Application and fixed fees for each month in the Second and Third Interim Fee Applications

The fee applications report a different total compensation and expense reimbursement amount

² McKinsey's First Interim Fee Application reports a monthly fee of \$740,000 for "Title III Support for PREPA " The summary description of services references services in August and September 2017 so we assume PREPA-related fees for two months in this period The fee application reports a different total compensation amount

³ Assuming McKinsey's \$740,000 monthly fee for "Title III Support for PREPA " is charged every month this period The fee application reports a different total compensation amount

⁴ Rothschild's First Interim Fee Application reports a \$200,000 per month fee for "advisory work related to PREPA " Therefore, we assume this fixed fee for each month in this period The fee application reports a different total compensation and expense reimbursement amount

- These fees and expenses do not reflect amounts paid or adjustments to prior fee applications

- Data from Case 17-03283-LTS, Docket No 2142-1, December 20, 2017; Case 17-03283-LTS, Docket No 2755, March 19, 2018; Case 17-03283-LTS, Docket No 3658, July 20, 2018; Case 17-04780-LTS, Docket No 1048, December 13, 2018; Case 17-03283-LTS, Docket No 2944, April 23, 2018; Case 17-03283-LTS, Docket No 4020, October 5, 2018; Case 17-03283-LTS, Docket No 4897, January 25, 2019; Case 17-03283-LTS, Docket No 2721, March 19, 2018; Case 17-03283-LTS, Docket No 3526, July 16, 2018; Case 17-03283-LTS, Docket No 4240, November 16, 2018; Case 17-03283-LTS, Docket No 2073, December 15, 2017; Case 17-03283-LTS, Docket No 2756-1, March 19, 2018; Case 17-03283-LTS, Docket No 3580, July 16, 2018; Case 17-03283-LTS, Docket No 4333, November 16, 2018; Case 17-03283-LTS, Docket No 3561, July 16, 2018; Case 17-03283-LTS, Docket No 4260, November 16, 2018

118. Despite having retained these advisors, as well as many past advisors and consultants as discussed in Section III.D above, PREPA struggles with nonperformance of generally accepted utility practices, as well as long-overdue initiatives that are uniformly recommended by their advisors. A receiver could focus the work of these outside consultants, potentially narrowing and targeting the scope of their assignments, and could more efficiently complete the operational and strategic initiatives identified for PREPA.

119. Unlike an independent receiver, the role of a consultant hired by PREPA is ultimately limited by the scope of their authority as defined by PREPA. The example of Filsinger Energy Partners illustrates the point. Mr. Filsinger's initial contract with PREPA allowed for wide-ranging authority similar to that of a CEO. PREPA's August 1 Fiscal Plan gave Filsinger Energy Partners responsibility for several initiatives, including the Work Plan 180 initiatives.

120. Later in August, a revised contract limited the scope of Mr. Filsinger's authority, making him clearly subordinate to PREPA's Executive Director.

121. At the same time, the status reports from the Work Plan 180 Initiatives show that several of the initiatives have been delayed due to the failure to obtain "Management" approval from PREPA. This example illustrates how a consultant is limited in their ability to assist PREPA by the effectiveness—or ineffectiveness—of PREPA's management. [See Section IV. A. 1., above.]

V. THE CONCESSION AND PRIVATIZATION MAY TAKE YEARS TO COMPLETE

A. PREPA'S STATED PROJECT TIMELINES APPEAR UNREALISTIC

122. In June 2018, PREPA and the P3 Authority issued an RFQ for a utility scale energy storage project.¹⁴⁵ Battery storage projects are a critical feature of PREPA's proposed transformation, including because battery storage: (i) is integral to incorporating utility scale renewables, because renewable generation is variable and not necessarily matched to load; (ii) gives additional reserve capacity so that PREPA can avoid running more costly peaking units; and (iii) represents a possible

¹⁴⁵ Puerto Rico Public Private Partnerships Authority, "Request for Qualifications for the Puerto Rico Electric Power Authority Utility Scale Energy Storage System Project," June 22, 2018

source of power in an outage scenario. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

123. Moreover, PREPA’s recently submitted IRP contemplates “very aggressive” battery energy storage systems (“BESS”) and solar photovoltaic generation projects over the first four years of the plan (2019 to 2022). The two projects are closely associated, as the amounts of BESS are heavily correlated with the total amount of solar generation and the local energy supply required for the proposed microgrids.¹⁴⁸ Specifically, the IRP plan calls for up to 900 MW of BESS and 1,200 MW of solar generation over the first four years of the plan.¹⁴⁹ However, the IRP itself notes that “the development and interconnection of these large amounts of solar PV, in such a short time, is a very aggressive plan for an isolated, island-based power system.”¹⁵⁰

¹⁴⁶ PRP3_00002834 – 836.

¹⁴⁷ PRP3_00002834 – 836.

¹⁴⁸ Puerto Rico Integrated Resource Plan 2018-2019, Draft, Submitted by Siemens, February 12, 2019, Section 1.2.1.

¹⁴⁹ Puerto Rico Integrated Resource Plan 2018-2019, Draft, Submitted by Siemens, February 12, 2019, Section 1.2.1.

¹⁵⁰ Puerto Rico Integrated Resource Plan 2018-2019, Draft, Submitted by Siemens, February 12, 2019, Section 1.2.1.

B. PREPA HAS FALLEN BEHIND ON ITS PROPOSED TRANSMISSION AND DISTRIBUTION CONCESSION AND ASSET SALE SCHEDULE

124. As discussed above, the Governor of Puerto Rico announced in January 2018 the plan to transform and modernize the electric system of Puerto Rico through the private ownership and/or operation of PREPA's assets. The announced timeline for completion of the transformation was 18 months, which would correspond to July 2019 counting from the date of the announcement.¹⁵¹

125. [REDACTED]

126. By June 2018, the original transformation timeline had slipped substantially with Citi and Rothschild, the two lead investment bankers ("PREPA's Financial Advisors"), discussing a different transaction timeline. According to PREPA's Financial Advisors, the market sounding phase of the transformation process would take place in Q2 2018.¹⁵⁴ The RFQ process would take place in Q3 2018.¹⁵⁵ The Request for Proposals ("RFP") process would run from Q3 2018 to Q2/Q3 2019, and the closing period would be in Q3/Q4 2019.¹⁵⁶

127. The October 23, 2018 Commonwealth Fiscal Plan listed key implementation milestones, including to close the privatization transaction by April 30, 2020.¹⁵⁷ Given this change in

¹⁵¹ Office of the Governor, "Message of the Governor of Puerto Rico," January 22, 2018.

¹⁵² R00001064. *See also* R00003809.

¹⁵³ R00001064. *See also* R00003809.

¹⁵⁴ "Re: The Potential Transformation of the Puerto Rico Electric Sector," Citi and Rothschild & Co, June 4, 2018, p. 4.

¹⁵⁵ "Re: The Potential Transformation of the Puerto Rico Electric Sector," Citi and Rothschild & Co, June 4, 2018, p. 4.

¹⁵⁶ "Re: The Potential Transformation of the Puerto Rico Electric Sector," Citi and Rothschild & Co, June 4, 2018, p. 4.

¹⁵⁷ "New Fiscal Plan for Puerto Rico: Restoring Growth and Prosperity, as certified by the Financial Oversight and Management Board for Puerto Rico," October 23, 2018.

dates, which had occurred within nine months of the initial announcement, the overall transformation timeline had already slipped by more than a year.

128. On October 31, 2018, the P3 Authority issued an RFQ for the Puerto Rico Electric Power Transmission and Distribution System. Responses to the RFQ were due on December 5, 2018.¹⁵⁸

129. Administration and legislative leaders now acknowledge that there are “challenges in meeting a goal to have the full process completed by late 2020.”¹⁵⁹ For example, Omar Marrero, Executive Director of the P3 Authority, stressed that, “[i]t is worth noting this would basically be the largest transaction in United States history related to the privatization of a public utility company.”¹⁶⁰ Marrero also referred to the December 2020 target date as an “aspiration.”¹⁶¹

130. The sale of PREPA’s generation assets can be completed only after the concession of the transmission and distribution network is completed and the regulatory structure and economics are properly defined. Omar Marrero explained, “you are not going to have a final offer for any generation assets until it is known how much the concession will charge and how much it is going to cost.”¹⁶² The contract for the concession of the transmission and distribution system will require a management fee and a reasonable rate of return on investment. The Energy Bureau and the government of Puerto Rico will both have roles for determining the concession charges. These processes will all need to occur before the generation assets can be sold.

131. However, the transmission and distribution concession is now not expected to be completed until 2020. In November 2018, the Executive Director of the Fiscal Agency and Financial Advisory Authority, Christian Sobrino acknowledged that the concession may not occur until 2020,

¹⁵⁸ “Request for Qualifications – Puerto Rico Electric Power Transmission and Distribution System - RFQ 2018-2,” Puerto Rico Public-Private Partnerships Authority, October 31, 2018.

¹⁵⁹ Reorg Research, Inc., “P3 Authority Aiming to launch PREPA privatization RFPs in November,” October 8, 2018.

¹⁶⁰ Reorg Research, Inc., “P3 Authority Aiming to launch PREPA privatization RFPs in November,” October 8, 2018.

¹⁶¹ Reorg Research, Inc., “P3 Authority Aiming to launch PREPA privatization RFPs in November,” October 8, 2018.

¹⁶² Eva Lloréns Vélez, “Final Puerto Rico T&D Concession Key Precursor for Generation Asset Sale,” *Caribbean Business*, January 25, 2019.

stating that, “I don’t want to set a fixed timeline on each step but I plan to have the transaction done by the end of December 2019. And then we would be going to the transition of PREPA as operator of T&D to the next operator.”¹⁶³

132. After that, substantial work to complete the sale of PREPA’s generation assets would still lie ahead, as potential bidders would need to factor the terms of that process into their value assessment and the deal structure terms. A transaction as complicated as PREPA’s transformation introduces additional complexities that will tend to extend the timeline and cause delays, if it can be completed by current management at all. Thus, if PREPA wants to achieve the concession and privatization goal in a timely manner (or perhaps at all), it is even more important for PREPA to have independent and professional management.

133. Apart from timing issues, coordinating a concession and privatization of this magnitude would also require significant effort on PREPA’s part, as there will be considerable due diligence required for both transactions.

C. DELAYS IN INSTITUTING A REGULATORY FRAMEWORK CREATE ADDITIONAL RISKS TO THE TRANSFORMATION AND PRIVATIZATION TIMELINE

134. Still other aspects of the transformation and privatization process are also already behind schedule. For example, according to the law that authorized PREPA’s privatization, the legislation that would create a regulatory framework to govern the transaction was supposed to be passed by December 2018. The deadline has expired without passage of the legislation; instead, the bill continues to be debated.

¹⁶³ Reorg Research, Inc., “Sobrino Says T&D Move Breaks New Ground in Energy System Overhaul, Cements Commitment to PREPA’s Privatization,” November 2, 2018.

135. Specifically, the Puerto Rico Electric Power System Transformation Act (Act 120-2018) required the Puerto Rico legislature to pass legislation creating a regulatory framework within 180 days, that is, by December 2018.¹⁶⁴

136. Puerto Rico Senate Special Committee on Energy Affairs Chairman Larry Seilhamer originally said he expected to file this legislation during the week of October 15, 2018, and also that passage of the bill is a key hurdle in PREPA's privatization.¹⁶⁵ Around that time, Senate Bill 1121 was filed.¹⁶⁶ For weeks, the bill was debated without reaching a consensus. Some of the suggested amendments included softening the language about the December 31, 2019 date for concession of transmission and distribution assets to clarify that it is a "goal and not a deadline for that transaction."¹⁶⁷ For example, PREPA Executive Director Jose Ortiz submitted testimony to the Puerto Rico legislature stating that "the period for the identification, evaluation and contracting of a concessionaire could be longer and the deadline could be later than proposed in this bill."¹⁶⁸

137. However, on November 9, 2018, Senate Bill 1121 was postponed for further debate until the next legislative session in January 2019.¹⁶⁹ The bill was approved by the Senate but could not be brought to a vote in the House of Representatives. This delay represented a failure to meet the 180-day deadline for passage of a regulatory framework, as required by Act 120-2018.

¹⁶⁴ Reorg Research, Inc., "Energy Policy, Regulatory Bill Expected in Puerto Rico Senate by Mid-October," October 2, 2018.

¹⁶⁵ Reorg Research, Inc., "Energy Policy, Regulatory Bill Expected in Puerto Rico Senate by Mid-October," October 2, 2018.

¹⁶⁶ Reorg Research, Inc., "Energy Regulatory, Policy Bill Filed in Puerto Rico Legislature," October 17, 2018 (Chairman Seilhamer further noted that the bill is important for private investors in PREPA, who need clarity on energy sources, efficiency standards, and modernization requirements, among other things).

¹⁶⁷ Reorg Research, Inc., "Energy Regulatory, Policy Bill Facing Amendments Amid Tight Time Frame for Passage," October 26, 2018.

¹⁶⁸ Reorg Research, Inc., "Energy Regulatory, Policy Bill Facing Amendments Amid Tight Time Frame for Passage," October 26, 2018.

¹⁶⁹ Reorg Research, Inc., "Energy Regulatory/Policy Bill Shelved Until January; Tax Reform, Opportunity Zone Bills on Track to Clear Legislature by Nov. 13 Deadline," November 9, 2018.

138. On January 22, 2019, it was reported that the Puerto Rico House of Representatives had approved an amended version of Senate Bill 1121.¹⁷⁰ The amended version included changes to PREPA's Governing Board. The governing board amendment would allow for 5 members nominated by the Governor and subject to confirmation by the Senate and House. Of these 5 members, 3 would be picked by the Governor and 1 each would be recommended by the Senate president and the House speaker. In addition, the governing board would have 1 member picked at the Governor's discretion, and 1 elected member for representing customer interests.

139. On January 31, 2019, it was reported that the Senate rejected the amended version of the bill proposed by the Puerto Rico House of Representatives.¹⁷¹ The Governor and Senator Larry Seilhamer, among others, had expressed opinions as to whether these amendments would be adverse to the spirit of the bill, including adverse to the need for a strong, independent energy regulator and to the de-politicization of PREPA.¹⁷² By February 4, 2019, both the Senate and the House had named members to a conference committee, which "would have until the end of the current session in June to submit a report and compromise version of the bill."¹⁷³ Notably, the timing for release of the bill has not been set.

140. As of the date of this declaration, passage of a regulatory framework has been delayed by almost three months from the original December 2018 deadline. These delays and uncertainty regarding the final legislation make it even less likely that PREPA will be able to timely achieve the

¹⁷⁰ Reorg Research Inc., "Puerto Rico House Passes Energy Bill With 20-Cent Rate Cap, PREPA Board Changes; Measure Headed Back to Senate," January 22, 2019.

¹⁷¹ Reorg Research Inc., "Update 1: Senate Rejects House Version of Energy Bill, Sends Measure to Conference Committee," January 31, 2019. Original story at Reorg Research Inc., "Seilhamer Says Puerto Rico Senate Will Reject House Changes to Energy Bill, Says Conference Committee Needs to Pass Consensus Version Before PREPA RFP Launch," January 28, 2019.

¹⁷² Reorg Research Inc., "Seilhamer Says Puerto Rico Senate Will Reject House Changes to Energy Bill, Says Conference Committee Needs to Pass Consensus Version Before PREPA RFP Launch," January 28, 2019. *See also*, Reorg Research Inc., "Rossello Declines to Speculate on COFINA Plan Confirmation Decision, Says House Energy Rate Cap Needs to Be Mitigated, Defends Legality of PRIS Board Nominations," January 23, 2019.

¹⁷³ Reorg Research Inc., "Update 2: House Rounds Out Energy Bill Conference Committee; Could Meet This Week," February 4, 2019. Original story at Reorg Research Inc., "Seilhamer Says Puerto Rico Senate Will Reject House Changes to Energy Bill, Says Conference Committee Needs to Pass Consensus Version Before PREPA RFP Launch," January 28, 2019.

concession and privatization under current management. For instance, one of the issues that has resulted in extensive debate and delays of the regulatory reform bill is the process for appointing PREPA board members. Because a receiver would replace the PREPA board, this point of contention would be eliminated.

D. FEDERAL FUNDING IS AT RISK DUE TO MISMANAGEMENT AT PREPA

1. PREPA's Fiscal Plan Depends on Federal Funding

141. In addition to privatization, the transformation of PREPA will require significant capital investment. Specifically, the Fiscal Plan requires \$12 billion in capital expenditures and other investments over the next five years alone.¹⁷⁴ This capital will be used to undertake critical improvements to PREPA's generation capabilities, transmission and distribution capabilities, and other infrastructure.

142. The Fiscal Plan anticipates that the majority of capital spending will be obtained from the U.S. federal government.¹⁷⁵ Jose Ortiz, PREPA's Executive Director, echoed this understanding during the 2nd Puerto Rico Grid Revitalization and Investment Forum, which took place on January 28-29 of this year. He described how PREPA hopes to use billions of dollars in potential Community Development Block Grant ("CDBG") funding from the U.S. Department of Housing and Urban Development ("HUD") during its transformation. And PROMESA oversight board member David Skeel recently recognized that billions of dollars in federal recovery funds are "absolutely essential," adding that there is "no hope" for Puerto Rico if that help is not forthcoming from Congress.¹⁷⁶

2. Federal Officials Have Expressed Skepticism Regarding Additional Funding in PREPA's Current State

143. However, ongoing mismanagement and politicization at PREPA (as well as in Puerto Rico more generally) have put federal and private funding at risk.

¹⁷⁴ See Fiscal Plan, pp.3,48.

¹⁷⁵ See Fiscal Plan, p. 48.

¹⁷⁶ Reorg Research Inc., "Skeel Expresses Optimism on Potential Supreme Court Appeal, Presenting a Commonwealth Plan of Adjustment That Can Win Confirmation in 2019," February 22, 2019.

144. FEMA and other federal officials, as well as the Energy Bureau, have expressed skepticism regarding the wisdom of providing PREPA with additional funding, as it is currently managed. Examples are provided below.

145. In a recent order, the Energy Bureau specifically identified how PREPA's mismanagement and delay of the IRP process "undermine stakeholders' and investors' trust, putting at risk the access to the funds needed to implement the IRP."¹⁷⁷

146. [REDACTED]

[REDACTED]

147. [REDACTED]

[REDACTED]

¹⁷⁷ CEPR-AP-2018-0001, "Resolution and Order," February 12, 2019.

¹⁷⁸ PREPA_LS0015697.

¹⁷⁹ PREPA_LS0015697 (emphasis added).

¹⁸⁰ PREPA_LS0046376.

[REDACTED]

148. [REDACTED]

[REDACTED]

149. [REDACTED]

[REDACTED]

¹⁸¹ PREPA_LS0046376 (emphasis omitted).

¹⁸² PREPA_LS0046415.

¹⁸³ PREPA_LS0046415.

¹⁸⁴ PREPA_LS0015939.

¹⁸⁵ PREPA_LS0015939.

[REDACTED]

150. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

151. Further, despite the repeated emphasis on the need to make sure that systems are in place to ensure responsible use of federal funds, such assurances cannot be obtained. On December 6, 2018, the FOMB sent a letter to HUD stating that “it can guarantee the proper use of the funding for the island through the Community Development Block Grant for Disaster Recovery program (CDBG-DR).”¹⁹⁰ The FOMB stated that it “oversee[s] the delivery of funds allocated as part of [its] oversight mandate on budget and liquidity, as well as the review of contracts, including those related to financing subcontractors dedicated to disaster assistance and recovery, for the purpose of ensuring that they are consistent with certified fiscal plans and budgets.”¹⁹¹ Meanwhile, the government of Puerto Rico continues to insist that it alone is in charge of such funds, creating confusion over how federal funds would be managed and used.¹⁹²

¹⁸⁶ PREPA_LS0015939.

¹⁸⁷ PREPA_LS0015939 (emphasis added).

¹⁸⁸ PREPA_LS0046025.

¹⁸⁹ PREPA_LS0046025.

¹⁹⁰ *El Nuevo Dia*, “The Board makes its own efforts,” December 14, 2018.

¹⁹¹ *El Nuevo Dia*, “The Board makes its own efforts,” December 14, 2018.

¹⁹² Governor Rossello disagreed with the FOMB’s characterization of its role, stating that the FOMB “have some roles, but they are not related to the release of funds.” *El Nuevo Dia*, “The Board makes its own efforts,” December 14, 2018.

152. In response to PREPA's mismanagement, the federal government has proposed creating a federal overseer in charge of ensuring that federal funds are disbursed and utilized in a responsible manner.¹⁹³ Yet this proposal has met resistance from the government of Puerto Rico. Governor Rosselló said that his administration would oppose the appointment of an official with "additional authority to control the flow of federal disaster dollars to the island."¹⁹⁴

153. In conclusion, PREPA's mismanagement of funds, contracts, and projects (in addition to issues within the government of Puerto Rico more broadly) have made officials in charge of overseeing federal aid and investment efforts skeptical of PREPA's ability to manage funding effectively. This jeopardizes the very funding needed to execute PREPA's transformation and privatization.

VI. A RECEIVER WOULD BRING INDEPENDENT, PROFESSIONAL MANAGEMENT TO PREPA AND PUT PREPA IN A FAR BETTER POSITION TO ACHIEVE THE FISCAL PLAN AND COMMONWEALTH GOALS

A. A RECEIVER WOULD REPLACE THE BOARD WITH PROFESSIONAL, INDEPENDENT MANAGEMENT

154. As stated in My October Report, a receiver would bring independent, professional management to PREPA, and thereby execute the goals of the Fiscal Plan.

155. I understand that the Receiver would stand in place of the current Governing Board and Executive Director. Currently, those positions are filled by the Governor and are subject to the same political forces that have proven problematic for PREPA. A receiver would be free to operate outside the influence of the government of Puerto Rico and is the only option that depoliticizes PREPA.

¹⁹³ Maria Miranda Sierra, "Fortaleza Rejects a Fed Coordinator for Funds," San Juan Daily Star, February 11, 2019.

¹⁹⁴ Reorg Research, Inc., "Puerto Rico – Commonwealth Says FEMA Is Undermining Congressional Intent to Ensure Infrastructure Reconstruction by Declining to Waive Pre-Existing Condition Requirement," February 11, 2019.

B. A RECEIVER COULD IMPLEMENT POSITIVE CHANGES QUICKLY

156. A receiver would be a utility expert. A receiver would not have to start over completely. The receiver would have the advantage of being able to leverage the existing professional service firms that have already been engaged to assist PREPA, as well as the many assessments and studies that have been performed by these consultants to date.¹⁹⁵

157. One change that a receiver would make instantly is to end PREPA's culture of mediocrity and political patronage. The receiver would also move quickly to identify competent managers within the ranks of PREPA and remove others without fear of political consequences.

158. With a culture of competency and independence, a receiver could move to more quickly implement the goals of the Fiscal Plan until PREPA has been privatized.

159. Transforming PREPA into a more responsible, efficient, independent, transparent, well-run utility based on best practices in the industry will increase the confidence of the municipal finance market, private market investors, and federal government agencies.

VII. CONCLUSION

160. PREPA's clear failure to meet its basic obligation of providing reliable and efficient electricity to the people of Puerto Rico and to implement the initiatives in the certified Fiscal Plan is evident. These failures, in turn, are a direct result of poor management and a politicized culture. In my opinion, management is, and has for many years been, suffering from inefficiency, lack of ability to execute, lack of independence, and lack of freedom from political interference. An independent, qualified receiver operating under court supervision would unequivocally improve PREPA's performance on each of these issues. The impact would be immediate and would increase over time, as improvements would have a compounding effect.

¹⁹⁵ A receiver would not cost more than professionals already engaged by PREPA. I used three benchmarks to estimate the annual cost of a receiver: the annual cost in the Fiscal Plan of the transmission and distribution concession; the annualized cost of Filsinger Energy Partners, and the annualized cost of Alix Partners services. Using these benchmarks, I estimate the annual cost of a receiver to be between \$15 and \$20 million per year.

VIII. MISCELLANEOUS

161. My work is ongoing, and my opinions are subject to revision based on new information (including documentation, reports or testimony by PREPA's expert), which subsequently may be provided to, or obtained by, me.

162. I declare under penalty of perjury of the laws of the United States of America that the foregoing is true and correct, and that this declaration was executed pursuant to 28 U.S.C. § 1746 on February 25, 2019, in Chicago, Illinois.

By: 
Sandra Ringelstetter Ennis

February 25, 2019

Exhibit 1. Materials Relied Upon

Court and Administrative Documents:

- “Amended First Interim Fee Application of Ankura Consulting Group, LLC for Compensation for Services Rendered and Reimbursement of Expenses as Financial Advisors to Puerto Rico Electric Power Authority (“PREPA”) for the Period July 2, 2017 Through September 30, 2017,” Case No. 17-03283-LTS, December 20, 2017.
- “Exhibit 1 - Invoices,” Case No. 17-03283-LTS, January 25, 2019.
- “Exhibit 1 - Invoices,” Case No. 17-03283-LTS, October 5, 2018.
- “Exhibit 2 - Amended and Restated Engagement Letter,” Case No. 17-03283-LTS, April 23, 2018.
- “Exhibit 3 - Invoices,” Case No. 17-03283-LTS, April 23, 2018.
- “First Interim Fee Application of Ankura Consulting Group, LLC for Compensation for Services Rendered and Reimbursement of Expenses as Financial Advisors to Puerto Rico Electric Power Authority (“PREPA”) for the Period February 1, 2018 Through May 31, 2018,” Case No. 17-03283-LTS, July 20, 2018.
- “First Interim Fee Application of Citigroup Global Markets Inc. for Allowance of Compensation and Reimbursement of Expenses Incurred as Investment Banker and Financial Advisors to Financial Oversight and Management Board, as Representative of the Debtors, From January 2017-January 2018,” Case No. 17-03283-LTS, April 23, 2018.
- “Fourth Interim Fee Application of Ankura Consulting Group, LLC for Compensation for Services Rendered and Reimbursement of Expenses as Financial Advisors to Puerto Rico Electric Power Authority (“PREPA”) for the Period June 1, 2018 Through September 30, 2018,” Case No. 17-03283-LTS, December 13, 2018.
- “Second Interim Fee Application of Ankura Consulting Group, LLC for Compensation for Services Rendered and Reimbursement of Expenses as Financial Advisors to Puerto Rico Electric Power Authority (“PREPA”) for the Period October 1, 2017 Through January 31, 2018,” Case No. 17-03283-LTS, March 19, 2018.
- “Second Interim Fee Application of Citigroup Global Markets Inc. for Allowance of Compensation for Services Rendered and Reimbursement of Expenses Incurred as Investment Banker and Financial Advisors, From January-May 2018,” Case No. 17-03283-LTS, October 5, 2018.
- “Second Interim Fee Application of Filsinger Energy Partners for Allowance of an Administrative Claim for Compensation and Reimbursement of Expenses Incurred as Chief Financial Advisor to Puerto Rico Electric Power Authority (“PREPA”), for the Period From February 1, 2018 Through May 31, 2018,” Case No. 17-03283-LTS, July 16, 2018.
- “Side Letter: Agreement for Independent Contractor Consulting Services,” Case No. 17-03283-LTS, March 19, 2018.
- “Summary of First Interim Fee Application of Rothschild Inc. for Allowance of Compensation for Services Rendered and for Reimbursement of Expenses as Financial Advisor and Investment Banker to the Puerto Rico Fiscal Agency and Financial Advisory Authority for the Period April 1, 2018 Through May 31, 2018,” Case No. 17-03283-LTS, July 16, 2018.
- “Summary of Second Interim Fee Application of Rothschild & Co US Inc. for Allowance of Compensation for Services Rendered and for Reimbursement of Expenses as Financial Advisor and Investment Banker to the Puerto Rico Fiscal Agency and Financial Advisory Authority for the Period June 1, 2018 Through September 30, 2018,” Case No. 17-03283-LTS, November 16, 2018.
- “Summary Sheet Accompanying First Interim Fee Application of McKinsey & Company, Inc. Washington D.C. as Consulting Services Provider to the Financial Oversight and Management Board for Puerto Rico, as Representative of the Debtors, The Commonwealth of Puerto Rico, et al., for the Period From May 3, 2017 Through September 30, 2017,” Case No. 17-03283-LTS, December 15, 2017.
- “Summary Sheet Accompanying Fourth Interim Fee Application of McKinsey & Company, Inc. Washington D.C. as Consulting Services Provider to the Financial Oversight and Management Board for Puerto Rico, as Representative of Debtors, The Commonwealth of Puerto Rico, et al., for the Period From June 1, 2018 Through September 30, 2018,” Case No. 17-03283-LTS, November 16, 2018.
- “Summary Sheet Accompanying Second Interim Fee Application of McKinsey & Company, Inc. Washington D.C. as Consulting Services Provider to the Financial Oversight and Management Board for Puerto Rico, for the Period From October 1, 2017 Through January 31, 2018,” Case No. 17-03283-LTS, March 19, 2018.
- “Summary Sheet Accompanying Third Interim Fee Application of McKinsey & Company, Inc. Washington D.C. as Consulting Services Provider to the Financial Oversight and Management Board for Puerto Rico, as Representative of Debtors, The Commonwealth of Puerto Rico, for the Period From February 1, 2018 Through May 31, 2018,” Case No. 17-03283-LTS, July 16, 2018.
- “Third Interim Fee Application of Citigroup Global Markets Inc. for Allowance of Compensation for Services Rendered and Reimbursement of Expenses Incurred as Investment Banker and Financial Advisors, From June-September 2018,” Case No. 17-03283-LTS, January 25, 2019.

- “Third Interim Fee Application of Filsinger Energy Partners for Allowance of an Administrative Claim for Compensation and Reimbursement of Expenses Incurred as Chief Financial Advisor to Puerto Rico Electric Power Authority (“PREPA”), for the Period From June 1, 2018 Through September 30, 2018,” Case No. 17-03283-LTS, November 16, 2018.
- § 207 Right to receivership upon default, 22 L.P.R.A. § 207
- CEPR-AI-2018-0001, “PREPA’s Compliance Filing,” January 16, 2019.
- CEPR-AI-2018-0001, “Associate Commissioner Angel R. Rivera de la Cruz, dissenting,” January 25, 2019.
- CEPR-AI-2018-0001, “Motion For Reconsideration,” November 30, 2018.
- CEPR-AI-2018-0001, “Motion in Order Compliance,” August 16, 2018.
- CEPR-AI-2018-0001, “PREPA’s Compliance Filing,” January 14, 2019.
- CEPR-AI-2018-0001, “Resolution and Order,” August 14, 2018.
- CEPR-AI-2018-0001, “Resolution and Order,” January 25, 2019.
- CEPR-AI-2018-0001, “Resolution and Order,” November 21, 2018.
- CEPR-AI-2018-0001, “Resolution and Order,” November 25, 2018.
- CEPR-AI-2018-0001, “Resolution and Order,” November 28, 2018.
- CEPR-AI-2018-0001, “Resolution and Order,” October 4, 2018.
- CEPR-AI-2018-0001, “Resolution,” January 11, 2019.
- CEPR-AI-2018-0001, “Resolution,” January 15, 2019.
- CEPR-AI-2018-0001, “Resolution,” January 16, 2019.
- CEPR-AP-2015-0001, “Final Resolution and Order,” January 10, 2017.
- CEPR-AP-2015-0001, “PREPA’s Compliance Filing, In re: Puerto Rico Electric Power Authority Rate Review, Case No. December 28, 2018.
- CEPR-AP-2015-0001, “PREPA’s Verified Motion for Extensions of Time,” November 15, 2018.
- CEPR-AP-2015-0001, “Resolution and Order,” November 28, 2018.
- CEPR-AP-2015-0001, “Resolution and Order,” October 19, 2018.
- CEPR-AP-2015-0001, “Resolution and Order,” September 28, 2018.
- CEPR-AP-2015-0001, “The Puerto Rico electric Power Authority’s (1) Draft Customer Notice in Compliance with the Energy Bureau’s Order of September 28th and (2) Reservation of Rights,” October 15, 2018.
- CEPR-AP-2018-0001, “Direct Testimony of Gregory Rivera Chico,” February 12, 2019.
- CEPR-AP-2018-0001, “Direct Testimony of Matthew Lee,” February 12, 2019.
- CEPR-AP-2018-0001, “Direct Testimony of Nelson Bacalao, Ph.D.,” February 12, 2019.
- CEPR-AP-2018-0001, “Direct Testimony of Jose Ortiz Vazquez,” February 12, 2019.
- CEPR-AP-2018-0001, “Direct Testimony of Todd W. Filsinger,” February 12, 2019.
- CEPR-AP-2018-0001, “Mocion Solicitando Aclaracion y Reconsideracion,” February 14, 2019.
- CEPR-AP-2018-0001, “Motion Commenting PREPA’s Informative Motion Regarding IRP Timeline,” October 5, 2018.
- CEPR-AP-2018-0001, “National’s Comments Regarding Strategy 1 Modeling,” November 30, 2018.
- CEPR-AP-2018-0001, “Order,” May 29, 2018.
- CEPR-AP-2018-0001, “PREPA’s (1) Compliance with the Energy Bureau’s September 5th and 18th Orders and (2) Informative Motion Regarding IRP Timeline,” September 25, 2018.
- CEPR-AP-2018-0001, “PREPA’s Compliance with the Energy Bureau’s September 28th Order,” October 15, 2018.
- CEPR-AP-2018-0001, “PREPA’s Motion For Confidential Treatment of Portions of Its Integrated Resource Plan Filing,” February 13, 2019.
- CEPR-AP-2018-0001, “PREPA’s Motion For Limited Waivers of Filing Requirements Under Regulation No. 9021,” February 13, 2019.
- CEPR-AP-2018-0001, “PREPA’s Motion To Submits Updated Report,” November 2, 2018.
- CEPR-AP-2018-0001, “PREPA’s Petition and Informative Motion Regarding its Accompanying Integrated Resource Plan Filing,” February 13, 2019.
- CEPR-AP-2018-0001, “PREPA’s Verified Motion for Extensions of Time,” November 15, 2018.
- CEPR-AP-2018-0001, “Resolution and Order,” February 12, 2019.
- CEPR-AP-2018-0001, “Resolution and Order,” February 15, 2019.

- CEPR-AP-2018-0001, “Resolution and Order,” February 15, 2019.
- CEPR-AP-2018-0001, “Resolution and Order,” November 6, 2018.
- CEPR-AP-2018-0001, “Resolution and Order,” November 8, 2018.
- CEPR-AP-2018-0001, “Resolution and Order,” September 18, 2018.
- CEPR-AP-2018-0001, “Resolution and Order,” September 28, 2018.
- CEPR-AP-2018-0001, “Resolution,” January 25, 2019.
- CEPR-AP-2018-0001, “Resolution,” November 8, 2018.
- CEPR-AP-2018-0001, “The Puerto Rico Electric Power Authority's Motion for a Limited Extension of Time,” January 22, 2019.
- CEPR-AP-2018-0002, “Resolution and Order,” August 16, 2018.
- CEPR-AP-2018-0002, “Intervenors' Comments Regarding Order of May 22, 2018,” May 25, 2018.
- CEPR-AP-2018-0002, “Motion Commenting PREPA's Informative Motion and Public Statements Regarding Review of FY19 Rates,” October 24, 2018.
- CEPR-AP-2018-0002, “Order,” October 30, 2018.
- CEPR-AP-2018-0002, “PREPA's (1) Compliance Filing for Items due August 10, 2018; and (2) Motion to Extend Due Date of Remaining Items,” August 10, 2018.
- CEPR-AP-2018-0002, “PREPA's Compliance Filing for Items Due July 13, 2018,” August 24, 2018.
- CEPR-AP-2018-0002, “PREPA's Compliance Filing for Items Due July 13, 2018,” July 20, 2018.
- CEPR-AP-2018-0002, “PREPA's Compliance Filing Pursuant to the Commission's May 22, 2018 Order,” May 25, 2018.
- CEPR-AP-2018-0002, “PREPA's Second Motion to Extend Due Date of Response to June 22, Order, Item A,” August 31, 2018.
- CEPR-AP-2018-0002, “PREPA's Third Motion to Extend Due Date of Response to June 22 Order, Item A,” September 17, 2018.
- CEPR-AP-2018-0002, “PREPA's Verified Response and Motion Regarding May 4th Order,” May 11, 2018.
- CEPR-AP-2018-0002, “Resoluion and Order Following Technical Conference,” May 22, 2018.
- CEPR-AP-2018-0002, “Resolution and Order Clarifying Commission Order of May 22, 2018,” June 22, 2018.
- CEPR-AP-2018-0002, “Resolution and Order Establishing Calendar for Submission of Information,” June 22, 2018.
- CEPR-AP-2018-0002, “Resolution and Order Regarding Rates for Fiscal Year 2019,” May 4, 2018.
- CEPR-AP-2018-0002, “Resolution and Order,” November 20, 2018.
- CEPR-AP-2018-0002, “Resolution and Order,” September 14, 2018.
- CEPR-AP-2018-0002, “Resolution,” December 21, 2018.
- CEPR-MI-2018-0001, “PREPA's Compliance Filing,” December 26, 2018.
- CEPR-MI-2018-0001, “The Puerto Rico Electric Power Authority's Motion to Stay or Extend Due Date for Proposed Interconnection Regulation,” September 17, 2018.
- CEPR-MI-2018-0001, “PREPA's Compliance Filing,” December 26, 2018.
- CEPR-MI-2018-0001, “Resolution,” May 16, 2018.
- CEPR-MI-2018-0001, “The Puerto Rico Electric Power Authority's Motion to Stay or Extend Due Date for Proposed Interconnection Regulation,” September 17, 2018.
- CEPR-MI-2018-0008, “Resolution and Order,” September 24, 2018.
- CEPR-MI-2018-0008, “Resolution,” January 31, 2019.
- CEPR-MI-2018-0008, “The Puerto Rico Electric Power Authority's Second Motion to Stay or Extend Due Date for Proposed Interconnection Regulation,” October 31, 2018.
- CEPR-MI-2018-0008, “Order,” December 20, 2018.
- CEPR-MI-2018-0008, “Order,” May 16, 2018.
- CEPR-MI-2018-0008, “Resolution and Order,” November 8, 2018.
- CEPR-MI-2018-0008, “Resolution,” January 31, 2019.
- CEPR-MI-2018-0008, “The Puerto Rico Electric Power Authority's Second Motion to Stay or Extend Due Date for Proposed Interconnection Regulation,” October 31, 2018.
- Class Action complaint, *In re: Ismael Marrero Rolon, et al.*, Case No. 15 CV 0167-JAG-MEL, February 24, 2015.
- Continued Deposition of Todd W. Filsinger, *In re: The Financial Oversight and Management Board for Puerto Rico, et al.*, Case No. 17 BK 3283-LTS, February 14, 2018.

- Declaration of Robert A. Lamb In Support of Motion of National Public Finance Guarantee Corporation, Assured Guaranty Corp., Assured Guaranty Municipal Corp., and Syncora Guarantee Inc., for Relief from the Automatic Stay to Allow Movants to Enforce Their Statutory Right to Have A Receiver Appointed, *In re: the Financial Oversight and Management Board for Puerto Rico*, Case No. 17-BK-03283-LTS, October 3, 2018.
- Declaration of Robert Berezin in Support of Motion of National Public Finance Guarantee Corporation, Assured Guaranty Corp., Assured Guaranty Municipal Corp., and Syncora Guarantee Inc. for Relief from the Automatic Stay to Allow Movants to Enforce Their Statutory Right to Have Receiver Appointed, *In re: The Financial Oversight and Management Board for Puerto Rico*, et No. 17 BK 4780-LTS, October 4, 2018.
- Deposition of Sandra Ringelstetter Ennis, *In re: The Financial Oversight and Management Board for Puerto Rico, et al.*, Case No. 17 BK 4780-LTS, December 11, 2018.
- Deposition of Todd W. Filsinger, *In re: The Financial Oversight and Management Board for Puerto Rico, et al.*, Case No. 17 BK 3283-LTS, February 1, 2018.
- Entrillado Electronico, P. del S. 477
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- Margaret Dale and Elizabeth L. McKeen, "Re: PREPA, 17-BK-4780-LTS: Motion to Lift Stay - Movants' Objections and Responses to AAFAF and FOMB's Discovery Requests," November 7, 2018.
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Sandra Ringelstetter Ennis

Chief Operating Officer and Managing Director

Ms. Ringelstetter Ennis is NERA's Chief Operating Officer and oversees NERA's global operations, including business development, growth strategies, increasing efficiency across all aspects of operations, and the company's worldwide offices.

Ms. Ringelstetter Ennis has been involved in the energy industry for over 30 years as a consultant and expert specializing in wholesale electricity markets, asset valuation, and the modeling of electric systems. Her expertise includes market assessment, market price forecasting, power plant valuation, financing support, due diligence and transaction support, emission analyses for New Source Review (NSR) compliance, and methodologies and algorithms for the simulation of electric systems.

In the power generation sector, Ms. Ringelstetter Ennis has focused on assisting clients in the due diligence, acquisition, and financing of new and existing generating facilities. For both conventional and renewable generation projects, she has prepared independent valuations and market expert reports for internal investment review, offering memorandums, debt financing (including for the Department of Energy Loan Guarantee Program), and capital market bond ratings. She also provides market advisory services to clients regarding the impact of changes in fundamental market assumptions or proposed changes to market rules. Throughout her career, she has appeared as an expert witness regarding market analysis and power plant valuation. She has provided testimony before US District Courts, the US Federal Energy Regulatory Commission (FERC), several state commissions, and in arbitration proceedings.

Ms. Ringelstetter Ennis has extensive expertise providing analysis related to the NSR regulations of the Clean Air Act. She has provided litigation support and expert testimony for coal-fired generators in Environmental Protection Agency (EPA) and Sierra Club NSR enforcement actions, supported several clients through Section 114 requests under the Clean Air Act, performed numerous emission analyses for projects included in Notices of Violation issued by the EPA, and assisted clients in developing and implementing a process for ongoing NSR emission analyses and compliance submissions.

The foundation of much of Ms. Ringelstetter Ennis' work in the electricity sector is her expertise in the use of market simulation models, coupled with her engineering background and knowledge of power plant operations. She has led large modeling teams in complex consulting and litigation assignments including: managing analyses and model development for due diligence of all types of generating technologies including fossil-fueled, nuclear, integrated gasification, and renewables; asset acquisitions and divestitures of single facilities (generation and transmission) as well as portfolios across multiple markets; the preparation of independent market expert's reports to support debt financing in all US markets; damage and delay calculations for power plants with complex operating characteristics, including steam and power contracts for cogeneration facilities; and NSR litigation and compliance analyzing the historical and projected operation of coal-fired generators.

Education

University of Wisconsin – Madison, Wisconsin

Master of Science, Industrial Engineering-Operations Research, 1989

Bachelor of Science, Industrial Engineering, 1987

Employment History

NERA Economic Consulting

2015-Present Chief Operating Officer and Managing Director

2003-2014 Vice President

AcuPower/Global Energy Decisions LLC

2002-2003 Chief Operating Officer/Vice President

e-Acumen, Inc

2001-2002 Chief Operating Officer/Vice President Product Management

2000-2001 Executive Vice President Asset Valuation Services

PHB Hagler Bailly

2000 Vice President

1998-1999 Principal

1996-1998 Senior Consultant

R.W. Beck

1993-1996 Principal Engineer

1990-1993 Senior Engineer

Madison Gas and Electric Co.

1987-1990 Generation Planning Engineer I, II, and III

Professional Experience

Areas of Qualification

Power sector due diligence, asset valuation, market assessment, power market litigation support, and expert testimony; NSR litigation support, expert testimony, and emission increase analyses; and utility planning and systems modeling.

Asset Valuation and Market Assessment Advisory Services

Ms. Ringelstetter Ennis' work in the power sector has focused on acquisitions of generating facilities and their finance. Ms. Ringelstetter Ennis has provided valuation services to acquirers of power plants and utility assets (generation and transmission), assisting them in acquiring more than 25,000 MW of generation. She has also supervised the preparation of independent market expert's reports that supported financing for most of the major financings in North America.

Ms. Ringelstetter Ennis has provided asset valuation and market assessment services to the Department of Energy (DOE) under the Loan Guarantee Program, bidders in asset auctions, for private developers of power generation projects, for appraisals under sale/leaseback arrangements, and for the restructuring of debt for distressed power plant projects. Prior to her affiliation with NERA, Ms. Ringelstetter Ennis was responsible for e-Acumen's and PHB Hagler Bailly's asset valuation and market assessment work. She assisted bidders in many of the generation asset auctions in the U.S. and was responsible for the valuation and market assessment for several of the largest acquisitions of generating capacity including the New England Electric System assets, the Homer City station, and the Commonwealth Edison assets. She also led both firms' work on many major financings in the syndicated loan and capital markets, including the U.S. Generating financing of the NEES assets, Edison Mission Energy's financing of the Homer City station and the Commonwealth Edison assets, NRG Energy's financing of its northeast portfolio, West Coast Power's financing of its California assets, PP&L Global's financing of the Montana Power assets, Orion Power's financing of its Northeast portfolio, and several financings of new combined cycle plants.

Brief project summaries of Ms. Ringelstetter Ennis' recent asset valuation and market assessment experience:

- Provided due diligence, market assessment, and prepared an Independent Market Report for the DOE in support of a loan guarantee under Title XVII of the Energy Policy Act of 2005 for Georgia Power Company's proposed Vogtle 3 and 4 nuclear project in Georgia. Tasks included an assessment of the supply demand balance for the region, review of the Sponsor's market assumptions including natural gas prices and climate change policies, and identifying the regulatory risks for the project.
- Performed due diligence of an investment that involved the selection of a coal-fired power plant from a list of possible options. The coal-fired facilities considered were located in Illinois (in the MISO market) and Texas (in the ERCOT market). Tasks included an analysis and assessment of the likelihood of continued electricity production for each facility. Factors

considered included: the facility's competitiveness, or position in the dispatch order in the relevant market, possible changes in market structure (new market rules that could impact generators' profitability), the state regulatory environment (views on renewables and possible changes in regulations), and compliance with existing and proposed environmental regulations.

- Performed market assessment and valuation analysis of a technology designed to relieve congestion on the transmission system. Tasks included review of detailed power flow studies and analysis of congestion and market price impacts.
- Assessed the fair market sales value of a three unit coal-fired facility located in the PJM market per the terms of a sale/leaseback arrangement. The parties involved invoked the appraisal procedure as defined under the sale/leaseback documents and needed to obtain a determination of the fair market sales value of the undivided interest from a third independent appraiser. Reviewed and assessed the condition of the power plant, the environmental upgrades required for compliance with EPA regulations, and prepared a forecast of expected revenues and costs in the PJM energy and capacity markets.
- Performed due diligence, asset valuation, and a PJM market assessment for a project selected in the New Jersey Long-Term Capacity Agreement Pilot Program. Tasks included a detailed assessment of the RPM market for the next five years, potential generating unit retirements in response to future EPA regulations and requirements, and the impact of varying natural gas price levels.
- Provided due diligence, market assessment, and prepared an Independent Market Report for the DOE in support of a loan guarantee under Title XVII of the Energy Policy Act of 2005 for UniStar Nuclear's proposed Calvert Cliffs 3 nuclear project in Maryland. Tasks included an assessment of the market including the impact of various price levels of natural gas prices, climate change policies, and identifying the regulatory risks for the project.
- Provided due diligence, market assessment, and prepared an Independent Market Report for the DOE in support of a loan guarantee under Title XVII of the Energy Policy Act of 2005 for Nuclear Innovation North America's proposed South Texas 3 and 4 nuclear project in Texas. Tasks included an assessment of the market including the impact of various price levels of natural gas prices, climate change policies, and identifying the regulatory risks for the project.
- Prepared several Independent Market Reports for the DOE in support of loan guarantees under Title XVII of the Energy Policy Act of 2005. Tasks included an assessment of the market and regulatory risks for the specific projects and technologies. The scope of each of these due diligence/valuation projects included: analysis of the sponsor's business plan, review of the financial projections and financial models, review of the industry and competitors, and a legal and regulatory environment review. Project technologies included: integrated gas combined cycle, solar (PV and thermal), and solar manufacturing facilities.

- Performed due diligence and asset valuation for a potential developer of a combined cycle facility in the ERCOT region. Independent forecasts of energy for the ERCOT region were prepared. A detailed assessment of the ERCOT market was performed including a review of the demand and supply balance, the impact of renewables on the regional supply portfolio, changes in transmission capacity, as well as change in the energy market structure. Gross operating margins were estimated under different scenarios over a 20 year study period.
- Prepared an Independent Market Consultant Report for Entergy, Inc. to support Citi and Goldman Sachs and Co. regarding the financing of Enexus Energy Corporation, a spin-off of a portfolio of merchant nuclear generating units including the Indian Point 2 and 3, James A. Fitzpatrick, Pilgrim, Vermont Yankee, and Palisades, located in New York, Massachusetts, Vermont, and Michigan. Assessed future market prices for the NYISO, ISO-NE, and MISO for a 20 year forecast period. Performed a detailed market assessment of each market and estimated the portfolio's energy and capacity revenues under several scenarios. Supported Citi and Goldman during the due diligence process for potential investors of the estimated \$4.5 billion issuance of debt.
- Performed regulatory and market risk due diligence in the acquisition of Duquesne Light and Power. Assessed Duquesne's supply portfolio and the risk in their Provider of Last Resort business. Assessed likely scenarios for a transmission rate case associated with the allocation of costs between distribution and transmission service in the context of the FERC's recent decisions. Provided independent expert reports that supported the successful attraction of debt and equity for the deal.
- Performed due diligence for a potential buyer of a combined cycle facility in the PJM region. Independent forecasts of capacity and energy for the PJM region were prepared. A detailed assessment of the PJM market was performed including a review of the demand and supply balance, the impact of renewables on the regional supply portfolio, and recent RPM auction results. Gross operating margins were estimated under different scenarios over a 20 year study period.
- Performed due diligence for a bidder in the Fox Energy Center auction. Work efforts included a detailed market assessment of the MISO market including reviews of demand conditions, projected supply, and transmission upgrades. Prepared a valuation considering merchant capacity and energy revenues once the tolling agreement for the project terminates and assessed the impact of various CO₂ regimes on both the dispatch (capacity factor) of the plant and the estimated gross margins.
- Performed due diligence for a bidder in the Black Hill's auction process. Performed a market assessment of the WECC with focus on the California, Colorado, and Nevada market areas. A detailed assessment was prepared of supply and demand conditions including the renewable portfolio standards and available renewable resources. In addition to preparing a fundamental forecast of market power prices over a 20 year period, a detailed analysis was performed of capacity products in the respective market areas and an assessment of the likelihood of capacity revenues for each of the assets for the period after the end date of their current contracts. Estimates of gross margins were prepared under several scenarios with a focus on natural gas prices and CO₂ regimes.

- Performed due diligence for a bidder in the Lake Road auction process. Assisted with valuing the plant including a detailed assessment of demand and supply conditions in the ISO-NE including estimates of the outcome of the initial Forward Capacity Market (FCM). Valued the swap and tolling arrangements that were part of the client's financing plan. Assisted the client in understanding the transmission issues and the impact of the proposed transmission additions in the vicinity of the facility.
- Performed due diligence for a bidder in the MassPower auction process. Assisted with valuing the plant including a detailed assessment of demand and supply conditions in the ISO-NE including estimates of the outcome of the initial Forward Capacity Market (FCM).
- Performed due diligence for a client evaluating whether to buy a waste coal project under development. Examined the electric power pricing basis associated with the location of the plant, the cost of the plant, the cost of fuel, and the competitive position of the plant once developed. Examined renewable portfolio standards and future environmental regulation schemes and their likely impact on the value of the project.
- Conducted a market assessment of a storage battery capable of providing ancillary services and energy shifting in the New York market. Built a model of the two settlement energy market system to assess the ability to schedule and successfully arbitrage both time-based difference in prices as well as arbitraging the discrepancies that arise between the day-ahead and real-time markets. These models recognize the constraints of the market rules and structure in the New York ISO. The models were also extended to the New England ISO.
- Performed an appraisal of the Colstrip coal-fired facility in Montana per the terms of the facility lease buy-out clause. The appraisal included the income approach, replacement cost approach, and comparable sales approach. For the income approach, energy and capacity revenues were estimated over the life of the project based on a consensus view of future market prices for the Montana region using multiple market price forecasts available from commercial vendors. The cost to construct a similar facility and the economic depreciation of the existing facility were analyzed for the replacement cost approach. A detailed analysis was also performed of recent coal-fired generating unit transactions.
- Assisted in restructuring work for large international developer with distressed assets in the U.S. Scope of work included multi-market analyses, proforma analyses, and communications with lenders.

Asset Valuation Expert Testimony and Litigation Support

Ms. Ringelstetter Ennis has appeared as an expert witness for a variety of issues related to the generation sector. Most recently, she provided expert testimony regarding the analysis of the benefits of major capital improvement projects at a coal fired facility. She has also provided expert testimony regarding the valuation of a power plant in the PJM market for a contract dispute in an arbitration proceeding and provided an expert report to the FERC regarding the cost of peaking plants in New England.

Ms. Ringelstetter Ennis has appeared as an expert in US District Court, arbitration proceedings, and before regulatory commissions in Washington D.C., Massachusetts, and Texas, and the FERC.

Ms. Ringelstetter Ennis has provided litigation support in a variety of matters involving the power sector. Cases have involved damage calculations for contract breach, construction delay, and rejection of contracts through bankruptcy proceedings.

Brief project summaries of Ms. Ringelstetter Ennis's asset valuation and market assessment expert testimony and litigation support experience:

- Assisted E. ON Climate and Renewables, North America with a FERC matter related to the derivation of benefits and the appropriate allocation of transmission operating and maintenance costs for network upgrades.
- Prepared an expert report, two rebuttal reports, and provided deposition testimony on behalf of PacifiCorp in the matter Deseret Generation & Transmission Co-Operative, v. PacifiCorp, Case No. 2:10-cv-159 in the United States District Court, District of Utah. Reports addressed the quantification and valuation of disputed benefits of major capital improvements, a turbine replacement and scrubber upgrade, performed at a Hunter II, co-owned generating unit in Utah. Rebuttal report included a discussion of the transmission system and balancing authority operations.
- Prepared an assessment of the value of continued operation of a coal-fired generating unit from the perspective of the operator owner, the contractual co-owner, and an independent third party buyer. Results of the assessment were used to prepare an offer to buy out the contractual co-owner and settle the matter before continuing to arbitration.
- Performed the analysis for an expert report presenting damage calculations for an arbitration proceeding regarding rejected steam and power contracts for a cogeneration facility in the southeast.
- Provided litigation support for fair market valuations and/or appraisals of power generating assets for several proceedings. Assets were located throughout North America and included coal-fired as well as natural gas-fired technology.
- Prepared the analysis for expert testimony for an avoided cost case in Oklahoma. Topics included valuation of proposed cogeneration facility, avoided cost methodologies, various state's implementation of PURPA contracts, and review and critique of cogenerator's application.
- Led the litigation support and analysis for a power plant valuation in an assessment of delay damages. The results of the analyses were presented in an arbitration proceeding between the plant's owner and the plants construction contractor.

New Source Review Litigation Support and Expert Testimony

Ms. Ringelstetter Ennis has assisted clients with NSR related analysis for the last several years. She has supported several clients through Section 114 requests as well as performed numerous emission analyses for alleged projects included in Notices of Violation and Complaints issued by the EPA and the Sierra Club. Projects analyzed include boiler tube replacements and maintenance, turbine upgrades and efficiency improvements, and other routine maintenance activities. Ms. Ringelstetter Ennis has authored or assisted in preparing expert reports for several NSR enforcement cases. She has also assisted clients in developing and implementing a process for ongoing NSR emission analyses and compliance submissions.

Brief project summaries of Ms. Ringelstetter Ennis's NSR litigation support and expert testimony experience:

- Prepared an expert report, provided deposition testimony, and trial testimony on behalf of Ameren Missouri (Ameren) in the matter of United States of America v. Ameren Missouri, Civil Action No. 4:11-CV-00077-RWS in the United States District Court for the Eastern District of Missouri, Eastern Division. Provided findings and conclusions with respect to a review and analysis of the Company's reasonable possibility emissions analyses performed for two coal-fired steam generating units before and after a set of outages. Performed capable of accommodating emissions analyses, discussed the practice of system planning, provided a review of the projections of generation that Ameren prepared contemporaneously with the outages at issue for these generating units, and provided rebuttal to Plaintiffs' experts' analyses and conclusions.
- Prepared an expert report and provided deposition testimony on behalf of PPL Montana et. al, in the matter of Sierra Club and Montana Environmental Information Center v. PPL Montana LLC, Avista Corporation, Puget Sound Energy, Portland General Electric Company, Northwestern Corporation, and Pacificorp, Civil Action No. CV 13-32-BLG-DLC-JCL in the United States District Court for Montana, Billings Division. Provided findings and conclusions with respect to a review and analysis of the Company's emissions analyses and corporate projections of future unit operations before and after several outages. Projects include boiler maintenance and turbine upgrades.
- Providing litigation support services to a confidential client with respect to a Complaint, Notices of Violation, and 114 information requests issued by the EPA for projects performed at several coal-fired power plants (EPA Region 6). Tasks include company personnel interviews, data collection and review, preparation of responses, and analysis of historical operational data.
- Prepared an affidavit (Montana Thirteenth Judicial District Court Yellowstone County) and declarations (in response to the EPA) regarding confidential business information and trade secrets with respect to generating unit data describing operating performance and availability, as well as descriptions of maintenance and capital projects for boiler and turbine upgrade projects.

- Provided litigation support services to a confidential client with respect to Notices of Violation and a Complaint issued by the EPA for “projects” performed at several coal-fired power plants (EPA Region 7). Tasks included data collection and review, actual and projected emission calculations, application of the Actual-to-Future Actual and Actual-to-Projected Actual Applicability test, and other operational and projected analyses.
- Prepared an expert report on behalf of Dairyland Power Cooperative (DPC) in the matter of *Sierra Club v. Dairyland Power Cooperative*, Civil Action No. 10-CV-303 in the United States District Court for the Western District of Wisconsin. Provided findings and conclusions with respect to a review and analysis of the historical operating data for two coal-fired steam generating units before and after a set of outages identified by the Sierra Club, and a discussed what effect, if any, the identified work performed during those outages had on the annual production rate for the units at issue. Discussed the practice of system planning, described DPC’s approach to system planning, and provided a review of the projections of generation that DPC prepared contemporaneously with the outages at issue for these generating units.
- Provided litigation support services to Detroit Edison in the matter of *United States of America and Natural Resources Defense Council, Inc. and Sierra Club v. DTE Energy Company and Detroit Edison Company* Civil Action No. 2:10-cv-13101-BAF-RSW in the United States District Court for the Eastern District of Michigan. The matter involved the alleged violation of the PSD program for a boiler project performed at their Monroe coal-fired power plant. Tasks included data collection and review, review of the Company’s PROMOD runs, actual and projected emission calculations under the Actual-to-Projected Actual Applicability test, and preparation of a declaration, supplemental expert report, and surrebuttal expert report.
- Provided litigation support services to Midwest Generation LLC in the matter of *United States of America and the State of Illinois v. Midwest Generation LLC*, Civil Action No. 1:09-cv-05277 in the United States District Court for the Northern District of Illinois. Services provided with respect to a Complaint filed by the EPA for violation of the NSR program for boiler and turbine upgrade projects performed at several coal-fired power plants. Tasks included data collection and review, preparing responses to Section 114 requests, performing actual and projected emission calculations, and application of the Actual-to-Future Actual and Actual-to-Projected Actual Applicability test.
- Managed the litigation support team and emission increase analyses prepared in the matter *United States of America v. American Electric Power Service Corp.; Indiana Michigan Power Co., d/b/a American Electric Power; Ohio Power Company, d/b/a American Electric Power; Appalachian Power Company, d/b/a American Electric Power; Cardinal Operating Company; and Central Operating Company*, Case Nos. 2:99-cv-01182-EAS-TPK, C2-99-1250 in the United States District Court, for the Southern District of Ohio. Tasks included data warehouse development, database development, PROMOD modeling review, emission increases analyses, and expert report preparation.

New Source Review Advisory Services

- Provided NSR advisory services to a large coal-fired generating company. Services included development of a process for conducting NSR emissions increases analyses using the Actual-to-Projected-Actual Applicability emissions increase test and construction of a dynamic model to conduct the analyses for pre-project submissions. Services included working with outside counsel to prepare pre-project submissions for activities to be performed during routine planned outages. Recent analyses included emission analyses for a pollution control retrofit project and analyses of greenhouse gases.

Recent Presentations and Publications

- Assessing the Market, EUCI's *Natural Gas Power Plan Development: For New and Converted Generation Facilities*, July 28, 2015.
- FERC Order 1000 and Public Policy Transmission Projects, James Heidell and Sandra Ringelstetter, ABA Energy Committee Newsletter, Vol. 9, No. 2, May 2012.
- FERC Order 1000 and Public Policy Transmission Projects, James Heidell and Sandra Ringelstetter Ennis, March 5, 2012.
- Emission Analyses for Pollution Control Projects: The Other NSR Pollutants and GHGs, Energy, Utility, and Environment Conference 2012, January 31, 2012.
- Setting Up a Compliant Process for New Source Review, *Natural Gas and Electricity*, July 2011.
- New Source Review: Setting Up a "Compliant" Process, Energy, Utility, and Environment Conference 2011, February 1, 2011.
- The Critical Issue of Transmission, Cost Allocation: Status and Trends, Law Seminars International, October 7, 2010.
- The Due Diligence Process, Financing Renewable Energy Projects through the DOE LGPO, Annual Ocean Renewable Energy Conference, September 30, 2010.
- New Source Review Compliance, Emission Analysis Tools, Setting Up a Process, Determining the Calculations, & Preserving a Defense, American Coal Council, July 20, 2010.
- The Critical Issue of Transmission, Who Should Pay for What and How? Law Seminars International, October 8, 2009.
- Overview of Who Is Getting Funding for What Energy Projects, A Look at the Current Climate for Project Financing, Law Seminars International, June 22, 2009.
- How to Calculate Your Emissions, The Basic Calculation and Technical Challenges and Options, The New NSR Rule: Will Your Emissions Increase? Schiff Hardin Seminar, October 25, 2005.